23365

National Library of Canada / Bibliothèque nationale du Canada

CANADIAN THESES ON MICROFICHE / THÈSES CANADIENNES SUR MICROFICHE

NAME OF AUTHOR/*NOM DE L'AUTEUR* EDWARD ALBERT RAMSAY

TITLE OF THESIS/*TITRE DE LA THÈSE* APPRENTICESHIP DISCONTINUANCE IN THREE TRADE AREAS IN THE PROVINCE OF ALBERTA

UNIVERSITY/*UNIVERSITÉ* UNIVERSITY OF ALBERTA

DEGREE FOR WHICH THESIS WAS PRESENTED/*GRADE POUR LEQUEL CETTE THÈSE FUT PRÉSENTÉE* MASTER OF EDUCATION

YEAR THIS DEGREE CONFERRED/*ANNÉE D'OBTENTION DE CE DEGRÉ* 1974

NAME OF SUPERVISOR/*NOM DU DIRECTEUR DE THÈSE* DR JAMES E. GALLAGHER

Permission is hereby granted to the NATIONAL LIBRARY OF CANADA to microfilm this thesis and to lend or sell copies of the film.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

L'autorisation est, par la présente, accordée à la BIBLIOTHÈQUE NATIONALE DU CANADA de microfilmer cette thèse et de prêter ou de vendre des exemplaires du film.

L'auteur se réserve les autres droits de publication; ni la thèse ni de longs extraits de celle-ci ne doivent être imprimés ou autrement reproduits sans l'autorisation écrite de l'auteur.

DATED/*DATÉ* September 20, 1974 SIGNED/*SIGNÉ* Edward A Ramsay

PERMANENT ADDRESS/*RÉSIDENCE FIXÉ* 78 TWAIN DRIVE
WINNIPEG MANITOBA R3K 0R3

NL-91 (11-73)

THE UNIVERSITY OF ALBERTA

APPRENTICESHIP DISCONTINUANCE IN THREE TRADE AREAS IN THE PROVINCE OF ALBERTA

by

© EDWARD A. RAMSAY

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE

DEGREE OF MASTER OF EDUCATION

DEPARTMENT OF INDUSTRIAL AND VOCATIONAL EDUCATION

EDMONTON, ALBERTA

FALL 1974

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Apprenticeship Discontinuance in Three Trade Areas in the Province of Alberta.
submitted by Edward A. Ramsay
in partial fulfilment of the requirements for the degree of Master of Education.

.....
Supervisor

.....

.....

.....

Date Aug. 22/74

ABSTRACT

The study was designed to collect information which would describe persons who discontinued apprenticeship contracts in three trade areas in the Province of Alberta: carpentry, electrical construction, and motor mechanics. Second, third, and fourth year apprentices who cancelled in 1968, 1969, or 1970 were included in the study.

An instrument was developed to collect information and elicit opinions on:

1. The reasons for entering an apprenticeship
2. The attitudes and economic position of cancelled apprentices during apprenticeship
3. The reasons for leaving an apprenticeship
4. The attitudes and economic position of cancelled apprentices following their indentureship

Statistical procedures used to analyze the data included frequency counts and proportions of responses by trade, by calendar year, and by program year at cancellation. Chi-squares were calculated for many items and used as a means of directing attention to possible differences.

The results of the study revealed:

1. The person enrolling in an apprenticeship program who eventually drops out is one who has not completed his secondary education. He is approximately 23 years old and single. His father has a relatively low educational level and holds a job as a laborer, tradesman, or farm worker.

2. The person entering an apprenticeship expects a job with better pay and security. However, he finds that his pay as an apprentice is less than he can obtain if he leaves apprenticeship and he suffers from periods of unemployment.
3. The cancelled apprentice has a positive opinion towards his trade school training but believes the on-the-job training lacks provincial monitoring.
4. The cancelled apprentice is not likely to return to an apprenticeship to complete his training.
5. A partially completed apprenticeship program is of job value to approximately 25% of cancelled apprentices.
6. The main causes of cancellation are found in economic factors: unemployment, poor wages, and the attraction of a job with better pay.

ACKNOWLEDGEMENTS

Dr. J. E. Gallagher has my gratitude for his advice and guidance in the development of this study. I offer my sincere thanks, also to the other members of my committee, Dr. F. Ilott and Dr. L. Stewart.

The cooperation and support of the Provincial Apprenticeship Board, Edmonton, Alberta, made this study possible. I wish to thank the Board and in particular its retired director, Mr. F. E. Whittle, for their assistance.

I am indebted to Mrs. Lois Van Rooy for her helpful suggestions and editing, to Mrs. Mabel Liebrecht for her excellent typing under demanding circumstances, and finally, to Mr. Louis Rodkin for his assistance in writing a computer program.

TABLE OF CONTENTS

CHAPTER		PAGE
1	ORIENTATION TO THE PROBLEM AND ITS SIGNIFICANCE	1
	Orientation to the Problem	1
	Statement of the Problem	3
	Objectives of the Study	4
	Importance of the Study	4
	Delimitations	7
	Limitations	8
	Operational Definitions	8
	[illegible]od Used in the Study	10
	Population	10
	Instrument	11
	Introduction to the Text	12
2	REVIEW OF THE LITERATURE	13
	The Apprenticeship System	13
	The Apprenticeship System in Alberta	18
	Apprenticeship Discontinuance	23
	Summary	31
3	METHODOLOGY	33
	Instrumentation	33
	Sample	34
	Pilot Study	35
	Data Collection	38
	Returns	38
	Treatment of Data	40

CHAPTER PAGE

Comparison of Respondents to Sample 41

Summary 42

4 DESCRIPTION OF THE PERSONAL CHARACTERISTICS OF CANCELLED APPRENTICES 43

Age 43

Education Level 44

Credits Received in High School 46

Marks on Apprenticeship Board Examinations . . 49

Marital Status 49

Father's Education 50

Father's Occupation 51

5 DESCRIPTION OF THE APPRENTICESHIP PERIOD 55

Entering Apprenticeship 55

Reasons for Choosing a Particular Trade Field 56

Difficulty in Locating First Job 59

During Apprenticeship 59

Administration of the Apprenticeship Program 61

Trades School Training 67

On-the-Job Training 71

Withdrawing from Apprenticeship 78

Reasons for Withdrawing 78

Employment at Time of Withdrawal 80

The Cancelling Process 89

6 DESCRIPTION OF THE PERIOD FOLLOWING APPRENTICESHIP 92

Re-registration in an Apprenticeship Program . 92

CHAPTER PAGE

Employment History 96
Time to Obtain First Job 96
Wages 96
Number of Jobs 99
Unemployment 103
Present Work Status 106
Job of Respondents at Time of Study . . . 106
Take Home Pay from Present Job 106
Job Satisfaction 109
Ownership of Property 109
Benefits of Apprenticeship Training . . . 111
7 SUMMARY, CONCLUSIONS, DISCUSSION 118
Summary 118
The Problem 118
Procedure 119
Findings 119
Personal Characteristics 119
The Apprenticeship Period 121
Present Work Status 126
Conclusions 130
Discussions 132
REFERENCES 135
APPENDIX 1. Questionnaire . . . . . .
APPENDIX 2. Letters Sent to the Sample . . . . . .
APPENDIX 3. Frequency Counts for Chapter 4 . . . . . .
APPENDIX 4. Frequency Counts for Chapter 5 . . . . . .

CHAPTER PAGE

APPENDIX 5. Frequency Counts for Chapter 6 . . . . . .

LIST OF TABLES

Table	Description	Page
1	Population of Cancelled Apprentices by Trade, by Calendar Year, and by Program Year	11
2	Distribution of Sample by Trade, by Calendar Year, by Program Year	34
3	Distribution of Pilot Study Returns by Trade and Calendar Year	36
4	Frequency Distribution and Rate of Returns of Questionnaire, by Trade, by Calendar Year, by Year of Program	39
5	Comparison of Sample and Respondents by Age and by Marks on Apprenticeship Board Exams	41
6	Highest Grade Level Attained by Sample	45
7	Responses to Item 27: "In Which . . . Courses did you Receive more than 20 Credits While in High School?"	48
8	Average Marks of Sample on Last Apprenticeship Board Examinations	49
9	Responses to Item 29: "How Much Education did or does your Father have?"	52
10	Responses to Item 28: "What is or was your Father's Occupation?"	53
11	Responses to Item 4: "Why did you Enter into an Apprenticeship Contract?"	57
12	Responses to Item 5: "Why did you Indenture in this Particular Trade Field?"	58
13	Responses to Item 21: "How Much Difficulty did you have in Locating your First Job?"	60
14	Responses to Item 6: "Do the . . . Statements Express your Opinions During . . . Indentureship?"	64
15	Responses to Item 6: "Do the . . . Statements Express your Opinions During . . . Indentureship?" Grouped by Calendar Year	65

Table		Page
16	Responses to Item 6: "Do the . . . Statements Express your Opinions During . . . Indentureship?" Grouped by Program Year	66
17	Responses to Item 7: "Was the Course Taught at the Trade School . . . ;" Grouped by Trade	68
18	Responses to Item 7: "Was the Course Taught at the Trade School . . . ." Grouped by Calendar Year	69
19	Responses to Item 7: "Was the Course Taught at the Trade School . . . ." Grouped by Year of Program	70
20	Responses to Item 16: "What sort of Relationship did you have with your Immediate Supervisor During your Apprenticeship Period?"	72
21	Responses to Item 17: "During your Indentureship . . . you find . . ."	74
22	Responses to Item 31: "During your Apprenticeship Period at the Trades Training School, did you Receive Financial Assistance in Addition to the Regular Subsistance Allowance?"	76
23	Responses to Item 31, Second Part: Source of Financial Assistance of Respondents Who Received Aid During Period at Trades School in Addition to Manpower Assistance	77
24	Responses to Item 8: "What were your Reasons for Withdrawing from the Apprenticeship Program?"	79
25	Responses to Item 10(a): "Were you Employed when you Withdrew . . ."	81
26	Responses to Item 10(b): "How long were you Unemployed Before you withdrew?"	82
27	Responses to Item 11: "How long did you Work for the Employer with Whom you were Indentured?"	83
28	Responses to Item 12: ". . . Would you Return to the Firm in the Same or at a Higher Position?"	85
29	Responses to Item 13: "Were you Offered Steady Employment with your Employer at Time of Withdrawal?"	87

Table		Page
30	Responses to Item 18: "When you Withdrew from the Apprenticeship Program your Weekly 'Take Home' Pay was:"	88
31	Responses to Item 30: "Did you Discuss your Plans to Cancel your Apprenticeship with . . ."	90
32	Responses to Item 1: "Have you been Reinstated in the Same Trade or Re-registered in Another Trade?"	93
33	Responses to Item 2: "How Many Times have you been Re-registered or Reinstated . . ."	94
34	Distribution of Responses who Re-registered or Were Reinstated into Related or not Related Trades	95
35	Responses to Item 3: "Have you Subsequently Become a Qualified Journeyman?"	95
36	Responses to Item 14: "If you were not Offered Steady Employment or Left Employment, How Soon After Withdrawing did you get a Job?"	97
37	Responses to Item 15: "Once you Obtained a Job, or Returned to the Same Job, did you Receive . ."	98
38	Responses to Item 19: "Since Withdrawing from the Program How many Jobs have you Held, Including the Present One?"	100
39	Responses to Item 20(a): "If you held more than one Job, About what was the Shortest Period of Time that you had been on a Job?"	101
40	Responses to Item 20(b): "If you held more than one Job, About what was the Longest Period of Time you had been on a Job?"	102
41	Responses to Item 22: "Since Withdrawing have you been Unemployed at any Time?"	104
42	Number of Weeks out of Work During first time Unemployed After Withdrawal	105
43	Responses to Item 23: "What Kind of a Job are you Holding Down now?"	107
44	Responses to Item 24: "About how much are your Weekly Earnings (Take Home Pay) at your Present Job?"	108

Table		Page
45	Responses to Item 25: "How do you Feel about your Present Job?"	110
46	Responses to Item 32: "Do you own . . . ?"	112
47	Responses to Item 9: "If you had Completed your Apprenticeship, do you Believe that you Would have . . . ?"	113
48	Responses to Item 26: "Could you Perform your Present Job if you did not have Apprenticeship Training?"	115
49	Responses to Item 33: "Would you care to Add Additional Comments . . .?"	116

LIST OF FIGURES

Figure		Page
1	Rate of Graduation, Indenture, and Cancellation for the years 1960 to 1970 in the Province of Alberta	30
2	Mean Age of Sample by Trade, by Calendar Year, and by Program Year at Cancellation	44
3	Percent of Sample Single at Time of Indentureship by Trade, by Calendar Year, by Program Year	50

CHAPTER I

ORIENTATION TO THE PROBLEM AND ITS SIGNIFICANCE

Technical and vocational training has grown steadily in Canada over the past quarter of a century. Apprenticeship is an integral part of vocational training, and it too has grown. For example, records of apprenticeship in the Province of Alberta, with which this study is specifically concerned, show an increase of over 30 times in the number of active apprentices in a 23 year period, from 293 in eight trades in 1946 to 9,239 in 32 designated trades at the end of 1969 (Provincial Apprenticeship Board, 1970a). There are indications that future growth will extend apprenticeship into new industries and occupations (Department of Manpower and Immigration, 1968). Dispite the number of changes that have occurred in technology, in approaches to training, and in the function and specialization of the trades, it may be speculated that apprenticeship as a system of training will continue to be the major method of training tradesmen for some time to come (Muir, 1971).

Orientation to the Problem

Alberta's present apprenticeship program began with the passing of the Apprenticeship Act in 1944. The Apprenticeship Act makes provision (1) for designating and regulating trades, (2) for appointing an Apprenticeship Board and Advisory Committies at local and provincial levels, and (3) for regulating apprenticeships in regard to minimum age,

minimum education, and other requirements. This act together with the Tradesmen's Qualification Act and the Welding Act regulates apprenticeship training in the province. It assigns responsibility for in-service (on-the-job) training to the employer; it fixes responsibility for in-school training on the Apprenticeship Board. The Director of the Provincial Apprenticeship Board, Department of Labor, is responsible for the administration of the Acts and Regulations.

Apprenticeship programs provide career opportunities leading to the position of journeyman in most of the well-known trades. The period of apprenticeship in most trades is four years, and a program typically involves both in-service (on-the-job) training and trade school training. For example, a plumber must serve four years of indentureship, and each year during this time he must enroll for an eight week course at a trades training institution. During his time in the classroom he takes training in related trade theory and practice, in blueprint reading, and in the mathematics required to become a competent tradesman. During his on-the-job training he is provided with the opportunity to develop skills and practical knowledge.

Technology is developing rapidly and job content is constantly changing. The structure and content of the programs within the apprenticeship system must be periodically analyzed and changes made to meet the needs of both industry and apprentices. The Alberta Apprenticeship Board has constantly strived to keep abreast of developments in apprentice-

ship training and continually reviews its program. One problem that has been identified as a priority area for research is that of apprenticeship terminations. When this study was initiated, a comprehensive description of apprentices who terminated their apprenticeship program in Alberta was not available. The purpose of this research was to collect data that would provide that comprehensive description.

Over the 1960-1970 decade only 50 to 55% of the apprentices registered in the Alberta program completed their training in the specified four-year period. Each year between eight and ten percent of the apprenticeships was cancelled; in the five years between 1966 and 1970 there were 5,200 cancellations (Provincial Apprenticeship Board, 1971). The loss indicated by such figures represents a drain on the manpower and economic resources of the province. The whole aim of apprenticeship training is to transform unskilled and semi-skilled persons into certified tradesmen. When an apprentice does not complete a program, someone or something has failed (the employer, a government agency, the apprentice himself, and so on).

Statement of the Problem

The problem of the study reported here was to describe apprentices in Alberta who cancelled in the trade areas of carpentry, electrical construction, and motor mechanics during the years 1968, 1969, and 1970.

Objectives of the Study

The following objectives were established from the problem:

1. To determine why apprentices cancelled their apprenticeship agreement
2. To describe cancelled apprentices by trade, by number of years in apprenticeship training, and by calendar year of cancellation
3. To present a demographic description of those who cancelled based on age, marital status at indenture, education, father's education, occupation, and financial position
4. To determine why cancelled apprentices decided to enter an apprenticeship program in carpentry, electrical construction, or motor mechanics
5. To determine the attitude of cancelled apprentices toward their period of indentureship and toward their present employment

Importance of the Study

The dropout, that is, the student who terminates a course of study too early, has been the subject of considerable concern in recent years. What are the consequences to the person who drops out? What is being done to decrease the number of dropouts, in particular dropouts from apprenticeship training programs? The volume of the literature devoted to answering such questions attests to the importance placed on finding answers to the problem of the dropout. And this is the subject of this paper.

Schreiber, Kaplan, and Strom (1965) summarized eloquently both the scope of this concern and the consequences of dropping out of public school:

> The present day national concern for dropouts is not a new concern for educators. Enlightened teachers and administrators have always considered it one of their problems. Society's concern, buttressed by rising rates in live births, unemployment, delinquency, youth crime, and welfare costs, have catapulted it forward and made it one of education's major problems. Over and above these, today's dropout represents a waste in human resources [p.8].

Today's dropout is probably under a greater handicap than dropouts of former years, at least in economic terms. Indeed his finding employment is an increasing problem. Thompson and Nelson (1963) reported that the unskilled jobs once filled by high school dropouts are rapidly disappearing, and that consequently 25% of those between the ages of 16 and 21 who quit school before graduation are unemployed. Even those who find initial employment are likely to find that their opportunities are limited. As Whiteley (1967) warned, in writing about the drawbacks of early entry into employment without training,

> Though many young people find immediate financial reward by severing their ties with school life and entering the labor market, such rewards have definite limitations [p.14].

The limitations, in Whiteley's view, are imposed upon the individual by the nature of today's occupational structure, which demands that its prospective members possess increasingly higher levels of education and training.

Enrollment in an apprenticeship program is one answer for the public school dropout. As Ford (1962) has indicated,

> The adult vocational school (trades training school) provides training for persons who left the regular school system and are in the work force now. This may include the early dropouts, those who did not complete grade eight, nine, or ten or junior matriculation before leaving the regular schools . . . . It includes some 20,000 to 50,000 apprentices [p.8].

If the public school dropout in turn fails to complete his apprenticeship, his prospects are even more limited. He has established a pattern of failure for himself; in all likelihood he is repeating his family's pattern of failure, if Bernier's (1971) findings are correct. Bernier generalized that most apprentices come from "a social class in which the lowest occupational categories and a relatively low income level are to be found [p.15]." If his statements about Quebec apprentices are applicable outside the Province of Quebec, then concern must be shown for apprentices everywhere who drop out. The prospects of such persons are indeed bleak, and this is all the more reason that a priority be given the problem of apprenticeship dropouts.

Alberta, and specifically the Provincial Apprenticeship Board, has recognized the need to resolve this problem. In the March 1966 issue of its newsletter the Board stated, "In order to meet the requirements of the labor force, the retention rates of apprentices must be improved substantially [p.1]." In addition, the newsletter commented:

> The dropout of registered apprentices has been alarmingly high. On the average there has been as many cancellations in any one

> year as there has been graduates, half as many cancellations as there has been new apprentices [p.4].

In the August 1970 issue of its Apprenticeship Newsletter, the Provincial Apprenticeship Board announced that the federal and the provincial governments would cooperate to carry out "a study of factors underlying the decision to enter apprenticeship and factors underlying the decision to drop out of apprenticeship. This study will go beyond apprenticeship to examine decisions of journeymen to leave their trade [p.4]."

The further concern of the Board for increasing retention rates is evidenced by their desire to have an in depth study of the problem of cancellations. There has never been a follow-up study conducted in Alberta which describes apprentices who terminated their contracts before completing their period of indentureship. This study is important because such a description could provide data upon which improvements in apprenticeship programs may be based.

Delimitations

1. The study was restricted to cancelled apprentices in three trades--electrical construction, carpentry, and motor mechanic.
2. Only cancelled apprentices who had completed at least one year of their apprenticeship program were included. (Part of the reason is that the Apprenticeship Board destroys the files of apprentices who cancel during this initial year; on the other hand, if an apprentice

cancels in his second, third, or fourth year of apprenticeship, his file and updated address are kept for four years from the cancellation date).

3. The apprentices included had their apprenticeship contracts cancelled by the Alberta Provincial Apprenticeship Board during 1968, 1969, or 1970.
4. The study was restricted to apprentices who registered for their apprenticeship training with the Province of Alberta Apprenticeship Board and who remained in Alberta after terminating their apprenticeship program.

Limitations

The findings of the study are generalizable to cancelled apprentices in three trades in the Province of Alberta. The extent to which the findings are applicable to other geographic areas and other trades is not known.

Operational Definitions

1. Apprenticeship: A regulated system of skill training and education leading to the position of journeyman in various trades under the direction of the Provincial Apprenticeship Board, Alberta Department of Labor (Provincial Apprenticeship Board, 1970a).
2. Apprentice: A person at least sixteen years of age who enters into a written agreement with an employer to learn a designated trade. The contract requires a minimum number of specified hours of reasonably continuous employment. It offers the applicant a program of prac-

tical experience and related technical instruction. Each apprentice is registered with the Alberta Apprenticeship Board.

3. Journeyman: A person who has served a designated period of apprenticeship, and who has successfully completed all the Apprenticeship Board's examinations required for certification to practice a trade in the Province of Alberta.
4. Cancelled Apprentice: An apprentice who terminates or has terminated his written agreement with an employer after successfully completing at least one year of his indentureship but without becoming a certified journeyman.
5. Rate of Indenture: The number of new apprentices registered in the calendar year compared to the sum of the number of apprentices registered at the beginning of the year and the number of new apprentices registered during the year; expressed as a percentage (Provincial Apprenticeship Board, 1968a, p.1).
6. Rate of Cancellation: The number of apprenticeship contracts cancelled in a calendar year compared to the sum of the number of apprentices registered during the year; expressed as a percentage (Provincial Apprenticeship Board, 1968a, p.1).
7. Rate of Graduation: The number of graduated apprentices in a calendar year compared to the number of new apprentices registered in the calendar year of four years

earlier; expressed as a percentage (Provincial Apprenticeship Board, 1968a, p.1).

Method Used in the Study

Population: To limit the study to manageable dimensions three trades were selected from the over thirty apprenticeship programs available in Alberta. The following criteria were used in selecting the three trades:

1. The Provincial Apprenticeship Board was consulted. They recommended that the electrical, carpentry, and motor mechanics trades be chosen as samples. The electrical trade is highly regulated and strongly unionized. The carpentry trade, although highly unionized, is not strongly regulated and, unlike electrical, does not have compulsory certification. The motor mechanics trade has compulsory certification, but unlike the electrical trade it is difficult to regulate and control. The motor mechanics trade has more applications and more dropouts than any of the other apprenticeable trades.
2. The Federal-Provincial Review and Assessment Sub-Committee of the Occupational Training Act Committee of Deputy Ministers suggested that three trades be selected, analyzed, and used as examples of the types of problems that exist in the trades. The sub-committee selected the electrical, carpentry, and motor mechanics trades for the studies to be carried out for the Department of Manpower and Immigration and the Apprenticeship Branches of the various provinces (Muir, 1971, p.I.6).

3. Bernier (1971) and Muir (1971) used these three trades in their studies.

The size of the population is given in Table 1.

Table 1

POPULATION OF CANCELLED APPRENTICES BY TRADE, BY CALENDAR YEAR, AND BY PROGRAM YEAR

Calendar Year	Year of Program at Cancellation						
	Carpenters		Electricians		Motor Mechanics		Totals
	2	3 & 4	2	3 & 4	2	3 & 4	
1968	20	8	22	7	45	20	122
1969	22	7	16	10	32	32	119
1970	29	15	28	14	52	42	180
Totals	71	30	66	31	129	94	421

A sample (N=238) was selected from the population and a detailed description of the sample appears in Chapter 3.

Instrument. In order to collect the required data, an information questionnaire was designed to be sent to the sample. The design was based on the research literature, including previously used questionnaires on the knowledge of experts in the apprenticeship field, and on personally formed opinions. In all of the dropout studies reviewed, the questionnaire was the main vehicle of data collection. A copy of the questionnaire used is included in Appendix 1.

The development of the questionnaire is discussed in Chapter 3. To determine the content validity and reliability

of the instrument a pilot study was carried out and the results presented in Chapter 3. The face validity was determined in consultation with faculty members at the University of Alberta and officials of the Provincial Apprenticeship Board.

Introduction to the Text

Chapter 2 reviews the literature on apprenticeship systems in Alberta and elsewhere, and describes the methods used in and the findings of dropout studies. Chapter 3 outlines the procedures and methods used in the study. Chapters 4, 5, and 6 describe the cancelled apprentices with Chapter 4 containing a description of their personal characteristics, Chapter 5 a description of their apprenticeship period, and Chapter 6 a description of apprentices subsequent to their withdrawal. Chapter 7 presents the summary, conclusions, and recommendations.

CHAPTER 2

REVIEW OF THE LITERATURE

The literature was reviewed to describe the apprenticeship programs in Alberta, other parts of Canada and other countries. The purposes of this review were:

1. To learn about the methods used by other apprenticeship systems to describe cancelled apprentices
2. To determine the magnitude of the problem of the problem of cancellation of apprenticeship and its effect on the preparation of skilled manpower

The Apprenticeship System

Apprenticeship is one of the oldest methods of training in use by man. It has changed little over the years. Muir (1971) commented that:

> Despite the number of changes that have occurred in technology, in approaches to training, in learning theory and in the function and specialization of the trades, the skills of the trade are still passed from journeyman to apprentice in much the same way as was done under the guild system. The only real major change which has occurred in the system of training over the centuries has been the introduction of the trade school into the system [p.I.1].

Studies by Muir (1971) and Bernier (1971) found that while there was controversy concerning the structure and content of apprenticeship programs in Canada, the acceptance of apprenticeship as a system of preparing skilled manpower

was almost universal. Some experts in the United States say their apprenticeship training system is moribund while others say it is the most effective way to train workers for careers in the skilled trades.

In Canada, apprenticeship has grown steadily over the past quarter of a century. Although apprenticeship training is under the jurisdiction of the provinces, the rate of growth has depended largely on the financial support provided by the federal government (Department of Manpower and Immigration, 1968, p.2). The federal government has been involved in providing assistance to the provinces for apprenticeship training since 1944. Muir (1971) draws two conclusions regarding the development of the apprenticeship system in Canada:

> a) The renewed interest in apprenticeship was sparked by the federal government and their willingness to invest heavily in Apprenticeship training.
> b) With the government's support of the system, some trade unions were fairly quick to establish the mechanism for restricting entry into the trade and for preventing "illegal men" from practising the trade. These restrictions were endorsed and enforced by the government [p.IV.19].

A number of groups recognized the need for assuring an adequate supply of skilled workers for the industries of the country. The first standing committee on apprenticeship and industrial training of the National Apprenticeship Training Advisory Committee recommended that "A thorough study be made of existing apprenticeship programs and of the development of additional programs [Drinkwater, 1963, p.361]."

Their report further urged that efforts be made to induce young people to enter and continue in courses of apprenticeship or vocational training. In a speech to the Federal-Provincial Labor Conference, Ford was reported by Drinkwater (1964) to have said:

> Apprenticeship is no longer an isolated device for developing the productive capacities for the labor force. It is instead considered a device that must be interrelated with other manpower training programs [p.264].

Some of the problems involved in apprenticeship training were recognized and Ford (cited by Drinkwater, 1964) stated these clearly:

- the problem lends itself to restrictions by vested interests;
- unrealistic entrance requirements are imposed in a number of designated trades;
- there continues to be an over-emphasis on controls, restrictions and regulations in the apprenticeship program;
- apprenticeship programs have not been developed at anything like the rate at which it is growing [p.265].

Nearly all of the literature reviewed on Canadian apprenticeship training is written in a positive tone, and any criticism is constructively aimed at advancing the cause of apprenticeship training. Typical of the wide support given apprenticeship training is this statement by the Apprenticeship Training Committee (1964) of the Canadian Construction Association at its 46th annual meeting:

> The Association has decided to accelerate its activities to promote apprenticeship training after having concluded that employment opportunities, increased production and improved

> workmanship were becoming more dependent on the education and trade training of the Canadian Labor force [p.191].

A number of the provincial apprenticeship branches and the federal Department of Manpower and Immigration have established areas of joint research on apprenticeship training. The Muir (1971) and Bernier (1971) reports are two such cooperative projects available at the writing of this report.

Apprenticeship training in the United States has not had such unqualified support. In fact Feisil (1968) maintained that:

> Apprenticeship is not an important source of training in the United States . . . . Relative to the working population under age 20 the number of apprentices is miniscule compared to the proportions of apprentices in Great Britain [p.127].

Foltman (1964) wrote that "Many thoughtful students of this aspect of industrial training seriously believe that apprenticeship is now obsolete [p.28]." He elaborated on this by saying:

> Technological and occupational changes; changing attitudes toward skilled occupations; reluctant employers; reluctant unions; and a relatively small staff for promotion--all of these militate against the creation of apprenticeship training programs [p.33].

However, apprenticeship training does have its advocates in the United States, many of whom are or were in a position to influence the course of apprenticeship training. George Meany (cited by Foltman, 1964), speaking as president of the AFL-CIO, contended:

> There is general agreement that the demand for skilled workers will grow very rapidly in the next decade, while the opportunities for unskilled workers will continue to shrink. Therefore, our interest and the national interest must look to an across the board increase in Apprenticeship training [p.30].

Some of the writers in the United States blame the demise of apprenticeship on lack of data and knowledge. Murphy (1967) felt that "The basic facts surrounding apprenticeship have been for too long a matter of individual experiences, conjecture and periscope observation [p.108]." Christian (1964) observed:

> Skill development which combines instruction in theory with actual practice and controlled experience on the job is the best means of skill development for occupations beyond the routinely manipulative. For this and other reasons we seek to refine, improve and extend apprenticeship concepts rather than scuttle them [p.625].

In 1966, the Office of Manpower, Automation and Training (OMAT) of the United States Department of Labor financed a study of apprenticeship in eight European countries. The study was carried out by the Center for Information and Research (CIRF), the research branch of the International Labor Organization. The study showed that "In six of the eight countries--Austria, Czechoslovakia, Denmark, Germany, Switzerland, and the United Kingdom--Apprenticeship is the principal means of acquiring recognized trade qualifications [p.14]." Taking 1950 as a base year, all eight national systems showed a marked increase in the number of apprentices over the previous years.

The systems studied in Europe had a number of basic concepts similar to apprenticeship systems in the United

States and Canada. The International Labor Organization (1966) outlined four of these similar concepts:

1. The transition of adolescents from full-time education to adult work should, wherever possible, be organized as a period of training in employment.
2. There should be special legislation for each major trade and occupation and detailed regulations to determine the relations between adolescent workers and their employers and the standards to be attained in training.
3. Public authorities, working in close cooperation with employer's and worker's organizations or semi-public bodies composed of representatives of industry and the trades, should supervise and control the implementation of these regulations.
4. Training should include both theoretical and practical instruction and should be provided within the hours of a normal work week [pp.10-11].

The Apprenticeship System in Alberta

Both the Apprenticeship Act and the Tradesmen's Qualification Act are administered by the Apprenticeship and Tradesmen's Qualification Branch of the Department of Labor in Alberta. In 1971 there were 32 trades designated under the Act.

The Apprenticeship Ace provided for the establishment of a Provincial Apprenticeship Board to advise the Minister on all matters concerning the apprenticeship system. The Board consists of five members: two representing industry, two from organized labor, and a chairman appointed by the government. The Apprenticeship Board chairman is the director and administrator of apprenticeship in the province. The director is assisted in administrating by a staff of field supervisors and subordinates responsible for the technical aspects of the system. Another group called

course coordinators are involved in organizing the trade school programs and administering examinations.

There are also local and provincial advisory committees. The local advisory committees hear complaints of employers and apprentices in matters pertaining to the training of apprentices and make recommendations concerning such subjects to the Provincial Board. The provincial advisory committees are made up of members from each of the local advisory committees and, according to Muir (1971), make recommendations regarding the trade or trades they represent on:

(i) qualifications concerning the age of apprentices;
(ii) length of time for apprenticeship;
(iii) the number of apprentices who may be apprentices to each employer;
(iv) the content of the courses to be given at the trades training school or center;
(v) the establishment of standards of proficiency to be reached during each year of apprenticeship and the setting of the final standard of competency upon which journeyman status is granted; and.
(vi) to conduct such practical tests and written examinations as may be deemed necessary to prove attainment of the desired standards [p.IV.66].

The training programs leading to the position of journeyman are also under the direction of the Provincial Apprenticeship Board. The Board (1966) summarized the training given as follows:

> An apprenticeship training program under the provisions of the Apprenticeship Act has its beginnings for a trade or industry when those (or their representatives) engaged in that trade or industry make petition to the Minister of Labor for designation under the Act. Apprenticeship in a designated trade begins

> for a young man when he and his employer jointly apply to the Apprenticeship Board for approval and registration of their proposed apprenticeship. Contracts are signed by all concerned. Providing a broad working experience and on-the-job training is the employer's responsibility. Technical school training is provided at public expense--costs being shared equally by the Provincial and Federal governments under the provisions of the Technical and Vocational Training Agreement and the Apprenticeship Agreement. Courses are offered mainly at the Northern Alberta Institute of Technology and the Southern Alberta Institute of Technology.
>
> Standards of training and competency are established and maintained by the Apprenticeship Board working in cooperation with management and labor in industry and with personnel of the technical schools. Provisions are made to award credit to those who approach apprenticeship with a background of technical education and of experience. The opportunity of education upgrading is provided for those who are selected by industry and who are unable to display the competency in basic educational skills considered essential for successful performance in a particular program. All who serve the working time, complete the technical school program and pass established examinations are awarded the Completion of Apprenticeship Certificate [Preface].

Under the Adult Occupational Training Act (April 1, 1967), the federal government agreed to pay training allowances to all apprentices who had been in the labor force for three or more years. An amendment to the Act now permits the payment of training allowances after one year in the labor force.

The terms of apprenticeship, ratios of apprentices to journeymen, and educational requirements depend on the trade classification. Muir (1971) summarized the requirements in Alberta for the three trades studied as follows:

Terms of Apprenticeship

(a) Carpentry. A person upon submission of proof of efficiency and not less than four years of qualifying experience in the carpenter trade may make application for examination for a Certification of Qualification as a carpenter.
Except as otherwise provided, the term of apprenticeship consists of four periods of twelve months each and each period consists of not less than sixteen hundred hours of employment, including time spent attending prescribed technical courses.

(b) Electrical Construction. Except as otherwise provided the term of apprenticeship consists of four periods of twelve months each and each period consists of not less than eighteen hundred hours of employment, including time spent attending prescribed technical courses.
Where an apprentice does not accumulate eighteen hundred hours in any twelve month period he may not advance to the next period until he has accumulated the required number of hours.

(c) Motor Mechanics. Except as otherwise provided, the term of apprenticeship consists of four periods of twelve months each and each period consists of not less than eighteen hundred hours of employment including time spent attending prescribed technical courses.
Where an apprentice does not accumulate eighteen hundred hours in any twelve month period he may not advance to the next period until he has accumulated the required number of hours.

Ratio of Apprentices to Journeymen

(a) Carpentry. A person engaged in the trade of a carpenter and who employs one journeyman or is himself a journeyman, may employ one apprentice, and for each five journeymen he employs he may employ one additional apprentice.

(b) Electrical Construction. A person engaged in the trade of electrician and who employs one journeyman or is himself a journeyman may employ one apprentice and

for each additional journeyman he employs, he may employ one additional apprentice.

(c) Motor Mechanics. A person engaged in the trade of a motor mechanic and who employs one journeyman or is himself a journeyman may employ one apprentice and for each additional two journeymen he employs, he may employ one additional apprentice.

Educational Requirements

(a) Carpentry. A person may become an apprentice in the trade of a carpenter only if, (a) he is sixteen years of age or older, and (b) he has at least a grade nine education or its equivalent, or he qualifies under subsection (2).

(b) Electrical Construction. A person may become an apprentice in the trade of an electrician only if, (a) he is sixteen years of age or older, (b) he has at least grade ten education, with mathematics 10 or its equivalent, or he qualifies under subsection (2).

(c) Motor Mechanics. A person may become an apprentice in the trade of a motor mechanic only if, (a) he is sixteen years of age or older, and preferably not over twenty-five years, (b) he has at least a grade nine education, or its equivalent, or he qualifies under subsection (2).

For all trades subsection (2) states that

The Director may authorize a person with less than the education required to become an apprentice if he is recommended by a local advisory committee and passes an examination prescribed by the Director [pp.IV,67,68,69].

Apprenticeship Discontinuance

While noncompletion of apprenticeship is considered to be a problem in Canada and the United States, the situation appears to be different in Europe. The International Labor Organization (1966) study reported, "Judging from the number of cancellations of indentures, the dropout rate in apprenticeship is insignificant in six of the countries studied, so insignificant, in fact, that it is seldom discussed or even mentioned. The highest figures reported (in Denmark) were between 15 and 20% of the total number of contracts [p.38]."

In the United States, there has been real concern. Foltman (1964) stated, "There is no reason for excessive jubilation when from 30 to 80% of apprentices drop out of training before completion [p.29]." In Transition from School to Work, Feisel (1968) reported, "The apprenticeship completion rate in the United States in post war years has ranged from over 40 to 60% for registered apprentices [p.129]."

Farber (1967) expressed the view that it is not the rate of dropouts that is critical. The important task is training enough tradesmen to meet the needs of industry. He explains his reasoning this way:

> So far as I know, no responsible person has agreed, for example, that our system of higher education is a failure because the national average of those who enter college and fail to finish is estimated at 40%. And if we measure the educational dropout rate in terms of the number of high school graduates who do not enter college, the dropout rate would, no doubt, equal or exceed the apprentice dropout rate.

> Nonetheless, critics of the apprenticeship system continue to consider the apprentice dropout rate as excessive. However, in the minds of many is the thought that apprenticeship should be producing more craftsmen to meet current and projected needs. Under these circumstances, an ideal completion rate is one which presumably satisfies precisely present and projected demands for the labor force and therefore must fluctuate with each successive change in the projection of demand [p.17].

One of the problems in assessing apprenticeship and in particular apprenticeship dropouts is the lack of data. Groom (1964) said, "Analysis of the decline in apprenticeship is hampered by lack of adequate statistics and conflicts in those that do exist [p.391]." Christian (1964) concurred in the lack of adequate research in apprenticeship: "There are many needs . . . . for research specific to the field of apprenticeship and a specialized research focal point dealing with apprenticeship will continue to be needed [p.361]."

The Bureau of Apprenticeship and Training, U.S. Department of Labor, carried out at least three studies on apprenticeship. Two of the studies, one conducted in 1954, and one in 1960, investigated persons who discontinued their apprenticeship programs during 1951 and 1952. A 1959 study was carried out on apprentices who completed an apprenticeship program in 1951.

The Bureau summarized their findings for the 1954 study as follows:

> An analysis was made of the kind of jobs they were holding about two years after they had dropped out of apprenticeship programs. It was found that 38% were working the same trade in which they had been apprentices, 12% were in a

> closely related trade, and 7% were in other skilled trades. Semi-skilled jobs were held by about 5% of the former apprentices, and the remaining 38% were employed in occupations having little or no relationship to the trades in which they have been apprenticed.
>
> The principal reason for discontinuing apprenticeship was financial considerations. Many former apprentices said that they had found it necessary to shift to higher paying jobs in order to meet increased financial obligations. Relatively few persons dropped out because they did not like the trade or because they could not do the required work [U.S. Department of Labor, 1954, p.1].

The study concluded that:

> Had the apprentices who cancelled completed their training they would now be making an even greater contribution toward meeting the nation's need for additional skilled workers. Nevertheless, the training they received while apprenticed is a definite asset in their present work [p.25].

And they had this recommendation:

> Joint apprenticeship committees, employers, and unions conducting apprenticeship programs may find it advantageous to conduct similar studies of the apprentices who drop out of their training programs [p.27].

The study of apprentices who had completed training was entitled Career Patterns of Former Apprentices (U.S. Department of Labor, 1959). It studied 6080 former apprentices who completed registered programs in 1951. All states except three participated in the study. The sample represented a cross section of trades.

The results showed former apprentices had a strong attachment to their trade. Six years after completing training 85% were working in the trades in which they completed their apprenticeship, 4% in closely related trades,

and 4% in other apprenticeable trades. Virtually all former apprentices were employed at the time the study was conducted in 1956. Most of the respondents indicated they decided to serve in apprenticeship because they liked the trade.

The 1960 study of the U.S. Department of Labor, titled Apprentice Dropouts in the Construction Industry, found that "Approximately half of the workers apprenticed (in registered programs) in the construction industry in the United States do not complete their training [p.1]." The dropout pattern ranges from about 30% for bricklaying apprentices to about 80% for roofer apprentices. Seventy-seven percent dropped out voluntarily, 20% were laid off or discharged, and 3% had no choice in the matter because the program was discontinued. The dropouts quit because they were dissatisfied with the pay or because they obtained better jobs, sometimes at the journeyman's rate of pay. Farber (1967) concluded:

> The apprentice completion rate varies directly with changes in inter-industry mobility and directly but not significantly with wage differentials between skilled and semi-skilled workers. These relationships suggest that participation in apprenticeship does respond to changes in economy [p.23].

A series of research studies on the problem were carried out in New Brunswick by Johnson for the provincial Department of Labor.

Johnson's first study examined dimensions of the dropout problem. He reported, "One problem that has been

with the apprenticeship program since its inception has been that of a high rate of dropouts [1967, p.1]."

In the first part of the study, a sample of three hundred apprentices who had their indentureships cancelled between January 1964 and April 1966 was selected. A matching sample of three hundred apprentices who had successfully completed their courses during the period between January 1965 and April 1966 was used as a comparison group.

Johnson (1967) summarized his analysis of the data as follows:

> 1) The completed apprentice was significantly older than the cancelled apprentice.
> 2) The completed apprentice had significantly more dependents.
> 3) The completed apprentice did NOT have significantly more formal education at the time of his indentureship.
> 4) The completed apprentice had significantly more pre-apprenticeship credit granted him prior to indentureship than did the cancelled apprentice [p.4].

The second part of the study involved collecting data concerning dropout factors from former employers and supervisors of cancelled apprentices. The study indicated that, although there may be many causes for discontinuance, the two most influential were "leaving to take jobs offering higher pay and immaturity of the apprentice [p.18]."

According to Johnson (1967), "The present study strongly suggests that one solution to the problem of the high dropout rate is the administration of a battery of aptitude and entry tests to all apprenticeship applicants prior to the commencement of training [p.21]."

In 1968 Johnson reviewed again the dropout problem in apprenticeship training. He interviewed a selected sample of apprentices who had cancelled in 1966 and a matched control group of apprentices who had completed their program. In addition to the interview the two groups were compared on the basis of their responses to the Sixteen Factor Questionnaire, developed by Catell, Saunders and Stice in 1957 (cited by Johnson, 1968).

The two main reasons for discontinuance were (1) inability to secure steady employment and (2) inability to earn a decent living. The study indicated that "Few apprentices fail their courses and the vast majority of those not completing their program simply 'drop-out' [p.18]."

Johnson's third study (Is Apprenticeship Seen as Worthwhile?) was an attempt to determine if cancelled apprentices perceived any value in becoming certified tradesmen. He summed up his findings as follows:

> On the basis of the data, the basic question posed by this study (Is apprenticeship seen as worthwhile?) can only be answered in the affirmative. However, the underlying and perhaps more important question of just how worthwhile it is perceived, does not have the same obvious answer [1970, p.21].

Bernier's study of dropouts in the carpentry, electrical, and motor mechanics trades was carried out in Quebec between April 1970 and March 1971, as part of a research program dealing with apprenticeship instituted under the terms of the Adult Occupational Training Act. Bernier (1971) found:

> The main causes of dropouts are . . . to be found in economic factors: first of all in unemployment, and secondly in the attraction of better pay right away in another occupation.
>
> Certain dropouts can be explained by poor relations with immediate supervisors and a type of on-the-job instructor which leaves much to be desired, not to mention the fear of being laid off before completion of training [p.27].

If solutions to the dropout problem were to be found, he concluded, "They must obviously concern a reduction in unemployment in the sectors affected, apprentices' pay and the way the trades are taught on the job [p.29]."

The Alberta Apprenticeship Board uses indicators other than number of terminations to gauge the effectiveness of their programs. One such indicator, the rate of graduation, compares the number of graduates in a calendar year to the number of new apprentices registered in the calendar year of four years earlier. Since apprentices are ideally expected to complete their apprenticeship within the prescribed time (generally four years), those who take longer represent a trained manpower loss to the province.

These other indicators are also an important part of the story. It can be misleading, for example, to simply state that the rate of cancellation in 1967 was 10%. The fact that the rate of graduation was only 58% reveals another side of the picture to the researcher.

In order to give an overview of the problem of incompletions and cancellations in the Province of Alberta, Figure 1 is included in the review of the literature. It

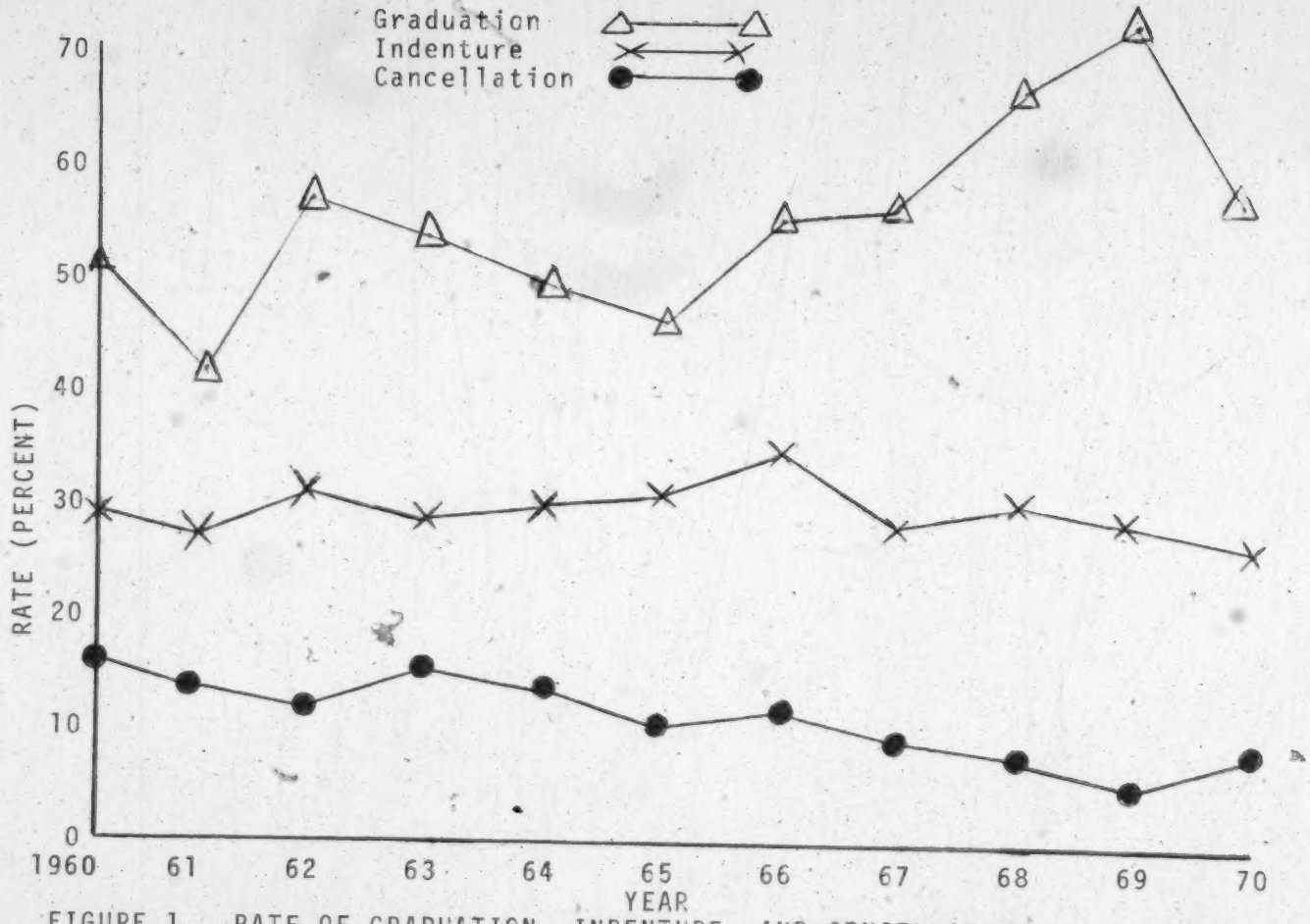

FIGURE 1. RATE OF GRADUATION, INDENTURE, AND CANCELLATION FOR THE YEARS 1960 TO 1970 IN THE PROVINCE OF ALBERTA.
SOURCE: PROVINCIAL APPRENTICESHIP BOARD ANNUAL REPORTS, 1960 TO 1970.

should be noted that except for the years 1968 and 1969, the rates of graduation have been less than 60% and the rates of cancellation have been in the order of 10% or higher.

Summary

The review of the literature revealed that most studies of the dropout problem were concerned with the public schools, both in Canada and in the United States. One main research paper and three studies (Bernier, 1971; Johnson, 1967, 1968, 1970) were cited which directed attention toward the problem of dropouts in apprenticeship in Canada.

This review of the literature indicated that:

1. Apprenticeship discontinuance studies describe: the reasons why cancelled apprentices enter a particular trade program; cancelled apprentices' personal characteristics; their opinions of the apprenticeship program; their employment history; their reasons for cancelling; and what they did following cancellation.
2. Most discontinuance studies used mailed questionnaires to collect data.
3. There were discontinuance studies that accepted a return rate of approximately 50% on their questionnaires.
4. Most studies were descriptive rather than inferential.

5. There are few studies on the problem of cancellation of apprenticeship.
6. Cancellation of apprenticeship is considered to be more of a problem in Canada and the United States than in Europe.
7. Apprenticeship is likely to continue to be an important method of training.
8. The number of designated trades in Alberta is increasing.
9. Public school dropout studies found a positive correlation between the socioeconomic status of the family and the school leaver.

CHAPTER 3

METHODOLOGY

This chapter describes the instrument, the methods employed in data collection, and an explanation of the procedures used in processing the data. It describes the selection of the sample and the representativeness of the respondents to the sample on two variables.

Instrumentation

The questionnaire was designed to be simple to complete and easily transferable to tables. There were three sections in the instrument: one to obtain data pertaining to the apprenticeship program of the respondents, another to obtain the employment history of the respondents, and a third to request personal data and individual viewpoints concerning apprenticeship. A copy of the questionnaire is contained in Appendix 1.

The questions and items relating directly to the apprenticeship program were developed using the three studies carried out by the Bureau of Apprenticeship Training, U.S. Department of Labor (1954, 1959, 1960); the three studies by Johnson (1967, 1968, 1970); the questionnaire used by The Canadian Department of Manpower and Immigration (1968), and the interviews and records of the Provincial Apprenticeship Board.

The questions and items requesting data on a personal and individual level and on employment history were developed using the National Education Association approach described by Schrieber, Kaplan and Strom (1965) and the studies by Mack (1969), Penner (1970), Scragg (1968), Van Hestern (1969), and Vincent (1965).

To maintain anonymity, the questionnaire was designed to permit removal of all personal identification.

Sample

The total number of cancelled apprentices in the sample was 238, consisting of 56 carpenters, 53 electricians, and 129 motor mechanics who had reached their second, third, or fourth year of apprenticeship and who had cancelled in either 1968, 1969, or 1970 (See Table 2).

Table 2

DISTRIBUTION OF SAMPLE BY TRADE, BY CALENDAR YEAR BY PROGRAM YEAR

Calendar Year	Carpenters		Electricians		Motor Mechanics		Totals
	2	3 & 4	2	3 & 4	2	3 & 4	
1968	10	5	11	5	22	15	68
1969	11	7	8	8	16	22	72
1970	14	9	14	7	26	28	98
	35	21	33	20	64	65	
Totals	56		53		129		238

The sample consisted of:

1. Fifty percent (randomly selected) of the population of cancelled second year apprentices (Replacements were made for any selected who had since left the province.)
2. All apprentices who cancelled in the third or fourth year of their program and who remained in the province of Alberta after cancellation (Since the entire population of third and fourth year apprentices was used, those who left the province could not be replaced).

Pilot Study

For the pilot study, a randomly selected stratified sample of eighteen cancelled apprentices was chosen: two from each trade and two from each calendar year that the study covered (1968, 1969, and 1970). As the entire population of apprentices who cancelled during their third and fourth year of training was included in the sample, only second year cancelled apprentices could be selected for the pilot study.

The returns from the pilot study were:

8 replies representing a 44.4% rate of return

4 returned marked "address unknown"

6 no response

The distribution of completed returns among the trades is given in Table 3.

Table 3

DISTRIBUTION OF PILOT STUDY RETURNS
BY TRADE AND CALENDAR YEAR

Calendar Year	Carpenters	Electricians	Motor Mechanics	Totals
1968	1	2	1	4
1969	0	1	0	1
1970	1	1	1	3
Totals	2	4	2	8

In nearly every case the questionnaire was completed in a way that permitted analysis of the items. In the eight replies only two questions were not checked off and only one respondent checked off a number of reasons for entering apprenticeship without ranking his choices. It appeared that the questions were easily understood and readily answerable.

To check the reliability of the instrument, two of the respondents, randomly selected, were contacted and asked to complete a second identical questionnaire. Their answers were nearly identical to their responses to the first questionnaire. In item 5 one of the respondents interchanged his second and third reason for indenturing in a particular trade field, and he forgot to check off a response to item 6(d). The other respondent had a different number of weeks for the shortest period of time he had been on a job in

answering item 20(a). Both respondents said they understood all the items and were not offended by any of the wording.

Although the distribution of returns was spread over the three trades and the three years the study covered, the rate of return (44.4%) was not as great as hoped for. Therefore, four of the six cancelled apprentices who did not respond were contacted by telephone. The telephone interview was an attempt to determine their reasons for not replying. Was there something in the letter or questionnaire that offended or made them feel uneasy about replying? Was the questionnaire too long, not easily understood, or not arranged well? All those interviewed by telephone responded favourably to the letter and to the questionnaire, and were willing to participate in the study. However, they either "misplaced the return envelope, were out of town for a few weeks, or intended to do it tomorrow." It was reasoned that the rate of returns could be greatly improved by a concentrated follow-up effort.

In view of the results of the pilot study and the consultation with experts as previously noted, it was believed that the instrument was satisfactory and required only a few minor changes. The wording of items 9, 16, and 25 was changed to grammatically correct form. In item 16, the request for the name of the supervisor of the cancelled apprentice was deleted. In item 26 the alternate "Yes, but training helped," was added, and in item 30 the column

"Don"t Remember" was added.

Data Collection

The survey questionnaire was mailed to the sample along with a covering letter (Appendix 2) and a stamped, self-addressed envelope on May 1, 1971. A follow-up letter was written to all delinquent participants nine days after the initial mailing. On May 22, 1971, an additional follow-up letter was sent out. The same letter with a note urgently requesting a reply was mailed June 1 to all who had not yet replied. During the second week in June, the files of cancelled apprentices at the Apprenticeship Board Office were rechecked in order to find additional information on the whereabouts of persons in the sample who were no longer at the previously used addresses. Questionnaires were sent to the new addresses obtained. During the third week in June, a number of the delinquent participants were telephoned and urged to reply. Also during the third week in June, the telephone directories of all places where participants were believed to live were checked for possible new addresses. Questionnaires were sent to all new addresses obtained. The survey was completed by the first of July 1971.

Returns

In the survey 139 replies were received, which represented a 58.4% response. Of these, 32 were carpenters (57.2%), 35 were electricians (66%), and 72 were motor mechanics (56.3%).

A 60.3% return was obtained from apprentices who cancelled in 1968, a 59.6% return from those who cancelled in 1969, and 56.1% from those who cancelled in 1970 (See Table 4).

Eighty-six (65.1%) of the 132 apprentices in the sample who cancelled during the second year of their program responded to the questionnaire. Fifty-three (50%) of the 106 who cancelled during the third or fourth year of their program responded. The lower response of cancelled apprentices in the third or fourth year of their program appeared to be a problem of obtaining a proper address. Twenty-three (9.7%) of the mailed questionnaires were returned marked "address unknown."

Table 4

FREQUENCY DISTRIBUTION AND RATE OF RETURNS OF QUESTIONNAIRE, BY TRADE, BY CALENDAR YEAR, BY YEAR OF PROGRAM

Group	N	Number of Returns	%N
		Grouped by Trade	
Carpenters	56	32	57.2
Electricians	53	35	66.0
Motor Mechanics	129	72	56.3
		Grouped by Calendar Year	
1968	68	41	60.3
1969	72	43	59.6
1970	98	55	56.1
		Grouped by Year of Program	
2	132	86	65.1
3 & 4	106	53	50.0
Totals	238	139	58.4

Treatment of Data

Responses to every questionnaire were examined and all answers classified and tabulated by hand.

The data from each questionnaire were transferred to tables and then to data sheets, which were then processed by a computer. A program was prepared to have the computer express all the cells of all items as a proportion of N and calculate chi-square for most items. Chi-squares were not calculated for items in which the results indicated an obvious conclusion or which had a number of cells with a frequency count of less than five. The tables containing the data from the questionnaire were placed in Appendix 4.

The null hypothesis, that there is no difference between the distribution of frequencies, was rejected at the 0.05 level of significance if the value obtained for χ^2 exceeded $\chi^2_{0.05}$ for k-1 degrees of freedom. Since the sampling distribution of this χ^2 statistic is only approximate, the chi-square distribution with k-1 degrees of freedom was used mainly as a means of directing attention to possible differences. The values of $\chi^2_{0.05}$ were obtained from Freund (1967), Table III, p.385.

For the two items involving salaries, the range and mean were calculated; and the mean was calculated for the ages and marks on Apprenticeship Board examinations of the sample and respondents.

Comparison of Respondents to Sample

Because of the rate of returns (58.4%), two characteristics of the respondents in this study were compared to the sample. While follow-up studies on apprentices (U.S. Department of Labor, 1959 and 1960) have been completed with approximately a 50% rate of returns, it was decided a check was necessary to insure the respondents had characteristics similar to those of the sample. The ages and marks on Apprenticeship Board examinations of the respondents were compared to the ages and marks of the sample as recorded in Table 5. Visual inspection of the table illustrates that the differences between the sample and those who responded were small. It was concluded that the respondents were representative of the sample.

Table 5

COMPARISON OF SAMPLE AND RESPONDENTS BY AGE AND BY MARKS ON APPRENTICESHIP BOARD EXAMS

	Sample			Respondents		
	Carp.	Elect.	M.M.	Carp.	Elect.	M.M.
Mean Age in Years at Time of Cancellation	22.5	23.0	24.0	21.9	23.1	24.2
Mean Marks on Last Apprenticeship Board Exams	72.8[a] 75.0[b]	63.8	69.2	73.8[a] 74.1[b]	64.1	70.5

Source: Provincial Apprenticeship Board, Department of Labor, Province of Alberta, Edmonton, Alberta.

[a] theory
[b] practical

Summary

This chapter described the development of the questionnaire, the pilot study, the method of data collection, the treatment of data, and the sample selection procedure.

Due to the comparatively low return obtained (58.4%), the respondents were compared to the sample on two variables. It was concluded that the respondents were representative of the sample.

CHAPTER 4

DESCRIPTION OF THE PERSONAL CHARACTERISTICS OF CANCELLED APPRENTICES

The data for the description of cancelled apprentices contained in Chapter 4 was obtained from the files of the Provincial Apprenticeship Board office in Edmonton, Alberta, and from the respondents through the questionnaire. A number of the tables in the chapter contain proportions rather than numerical counts. The frequency counts for these tables were placed in Appendix 3.

Age

The average age of the cancelled apprentices at the time of indenture was 23.2 years. As indicated in Table 3.1 of Appendix 3, 70.6% of the sample were between the ages of 16 and 24 and 29.4% were over 24. In fact, 31 or 13% of the sample, were over 31 years old. The median age was 23 years.

Figure 2 depicts the mean age of cancelled apprentices at cancellation by trade, by calendar year, and by program year. Cancelled apprentices in their third or fourth year had the highest mean of age of cancelled apprentices (24.1) followed closely by the motor mechanics (24.0).

The lowest mean age of 22.3 years (cancelled second year apprentices) differs by only 1.8 years from the highest mean age of 24.1 years (cancelled third and fourth year apprentices). The mean age varied little by trade, by program year,

and by calendar year of cancellation.

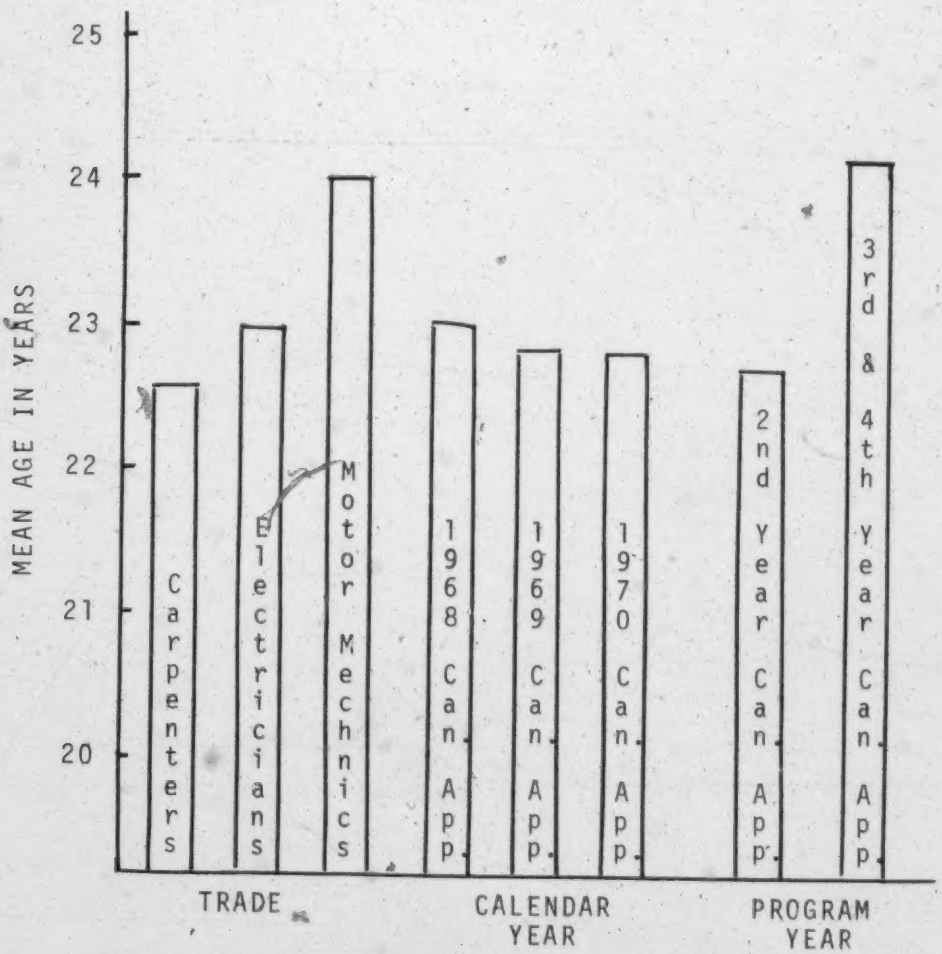

FIGURE 2. MEAN AGE OF SAMPLE BY TRADE, BY CALENDAR YEAR, AND BY PROGRAM YEAR AT CANCELLATION.
Source: Provincial Apprenticeship Board, Department of Labor, Province of Alberta, Edmonton, Alberta.

Education Level

The distribution of cancelled apprentices by highest school grade completed in Table 6 indicates that the education level of the majority of the cancelled apprentices meets or surpasses the minimum grade levels required by the Apprenticeship Board. As previously noted, Grade 9 is required for carpenters and motor mechanics and grade 10 for electri-

Table 6

HIGHEST GRADE LEVEL ATTAINED BY SAMPLE

Group	N	Grade Level Attained 8 or less	9	10	11	12
Grouped by Trade						
Carpenters	56	10	9	14	8	15
Electricians	53	1	3	13	14	22
Motor Mechanics	129	19	34	31	20	25
Grouped by Calendar Year						
1968	69	14	13	17	13	12
1969	72	6	11	19	13	23
1970	97	10	22	22	16	27
Grouped by Year of Program						
2	132	14	23	36	22	37
3 & 4	106	16	23	22	20	25
Totals	238	30	46	58	42	62

Source: Provincial Apprenticeship Board, Department of Labor Province of Alberta, Edmonton, Alberta

cians. Exceptions require a recommendation from a local advisory committee, and then they must pass an examination prescribed by the director of the Apprenticeship Board.

For the carpenters, 82.2% of the cancelled apprentices attained grade 9 or higher, while 98% of the electricians and 85.3% of the auto mechanics attained grade 9 or higher. For the total sample, 87.8% attained grade 9 or higher.

Looking at the grade level attained by calendar year of cancellation, 79.8% of those who cancelled in 1968, 91.7% of those who cancelled in 1969, and 89.7% of those who cancelled in 1970 attained a grade level of 9 or better.

For cancelled apprentices in the second year of their program, 89.5% attained grade 9 or better, and 84.9% of the cancelled apprentices in their third or fourth year attained grade 9 or better.

Credits Received in High School

In Alberta, every high school course is assigned a certain number of credits. The number of credits assigned to a course depends on the number of minutes of instruction time per week devoted to the subject. For example, Mathematics 10 is a five-credit course and this ordinarily means that mathematics is taught 40 minutes per day for five days a week. Again, Chemistry 10, a three-credit course, is taught 40 minutes per day for three days a week during the school year. A program consisting of courses having a total value of 35 credits is considered a full year's program. To obtain a high school diploma in Alberta a student must have earned 100 credits through his years in high school.

There are various course patterns that can be followed to obtain these 100 credits. To indicate what vocational subjects received focus in their high school training, the respondents in this study were asked to check off the course or courses in which they received more than 20 credits. This represented 20% of the credits required for a high school

diploma. They were asked, too, to indicate whether they had received this number of credits in academic courses. If a respondent recorded that he received more than 20 credits in both academic subjects and a vocational subject, the vocational subject was selected for the frequency count.

The returns for item 27 of the questionnaire expressed as a proportion of N are recorded in Table 7. The courses in which no respondents received more than 20 credits were omitted from the table.

The majority of the respondents--0.91 of the carpenters, 0.80 of the electricians, and 0.75 of the motor mechanics--did not receive more than 20 credits in a trades area in high school. However, 0.22 of the motor mechanics had more than 20 credits in a high school automotive course, and 0.11 of the electricians received more than 20 credits in a high school course in electricity. The electricians had a high proportion with more than 20 credits in academic subjects (0.69). The electricians had 0.47 in this category and the motor mechanics had only 0.28. Significant differences at the 0.05 level were found in the course patterns of the respondents when grouped by trade.

Examination of the returns to item 27 grouped by calendar year showed a significant difference among the respondents. As in the previous grouping, the majority either had over 20 credits in academic courses or did not attain 20 credits in any area while in which school. The 1969 respondents had 0.58 with 20 or more credits in academic subjects;

the 1968 and 1970 respondents had 0.39 and 0.33 respectively.

Grouping by year of program at cancellation reflected a similar result, with 0.78 of the second year apprentices and 0.83 of the third and fourth year apprentices either attaining 20 credits in academic courses or not attaining 20 credits in any area. There were no significant differences among the respondents in their course pattern.

Table 7

RESPONSES TO ITEM 27: "IN WHICH . . . COURSES DID YOU RECEIVE MORE THAN 20 CREDITS WHILE IN HIGH SCHOOL?" EXPRESSED AS A PROPORTION OF N

Group	N	Academic	Automotive	Electricity	Building Construction	Drafting	None
				Grouped by Trade			
Carpenters	32	0.47	0.03	0.00	0.06	0.00	0.44
Electricians	35	0.69	0.03	0.11	0.00	0.06	0.11
Motor Mechanic	72	0.28	0.22	0.00	0.00	0.03	0.47
Chi-square		48.33					
$\chi^2_{0.05}$ = 18.307							
				Grouped by Calendar Year			
1968	41	0.39	0.15	0.00	0.00	0.00	0.46
1969	43	0.58	0.12	0.00	0.00	0.00	0.30
1970	55	0.33	0.13	0.07	0.04	0.07	0.36
Chi-square		20.74					
$\chi^2_{0.05}$ = 18.307							
				Grouped by Year of Program			
2	86	0.44	0.15	0.03	0.02	0.01	0.34
3 & 4	53	0.40	0.09	0.02	0.00	0.06	0.43
Chi-square		5.63					
$\chi^2_{0.05}$ = 11.070							

Marks on Apprenticeship Board Examinations

The results of the last Apprenticeship Board Examinations (see Table 8) indicated that the cancelled apprentices had higher average marks than the required pass marks. The required pass marks may vary depending on the program year of apprenticeship.

Table 8

AVERAGE MARKS OF SAMPLE ON LAST APPRENTICESHIP BOARD EXAMINATIONS

Group	Average Mark %	Pass Mark %[a]
Carpenters	72.8 (theory) 75.0 (practical)	65 70
Electricians	63.8	55
Motor Mechanics	69.5	65

[a] Pass marks vary depending on year of program so highest mark required was used in the Table

Source: Provincial Apprenticeship Board, Department of Labor, Province of Alberta, Edmonton, Alberta

Marital Status

Of the total sample of 238 cancelled apprentices, 140, or 58.8% were single at the time of becoming indentured. Figure 3 shows that the percentage of carpenters that were single was 69.3%; 60.3% of the electricians and 55.8% of the motor mechanics were single. Of the apprentices who cancelled in 1968, 56% were single at the time of indenturing; of those who cancelled in 1969, 64% were single; of those who cancelled in 1970, 57% were unmarried. Of the

apprentices who cancelled during the second year of apprenticeship, 63.6% were single; 52.8% of those who cancelled during their third or fourth year were not married. Frequency count is given in Table 3.4 of Appendix 3.

At the time the questionnaire was circulated, 32.1% of the respondents were single.

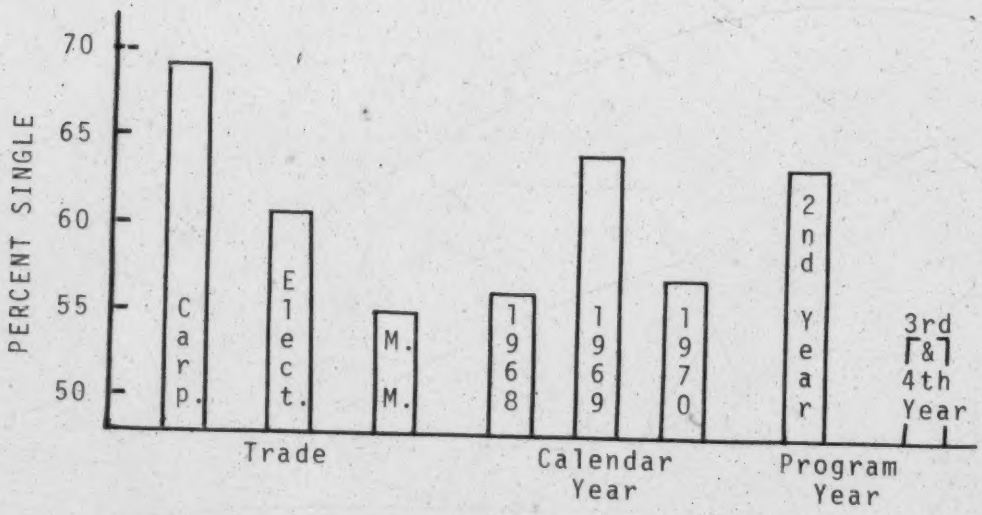

FIGURE 3. PERCENT OF SAMPLE SINGLE AT TIME OF INDENTURESHIP BY TRADE, BY CALENDAR YEAR, BY PROGRAM YEAR.
Source: Provincial Apprenticeship Board, Department of Labor, Province of Alberta, Edmonton, Alberta.

Father's Education

Grouped by trade, 0.50 of the carpenters, 0.54 of the electricians, and 0.66 of the motor mechanics, reported that their fathers did not go beyond grade 9. Only the motor mechanics respondents had any fathers that obtained a university degree. For the electricians, 0.14 of the fathers obtained some college training. A number of the respondents did not know what education their fathers had. These res-

ponses were recorded in the no response category and formed the major proportion of this category. The results are shown in Table 9.

The responses grouped by calendar year showed that 0.63 of the 1968, 0.49 of the 1969, and 0.62 of the 1970 respondents had fathers with grade 9 or less. Less than 0.12 of the respondents had fathers who completed high school. The chi-square test indicated no significant difference among the respondents grouped by trade and by calendar year.

Examining the results for the respondents grouped by year of program, 0.56 of the second year and 0.64 of the third and fourth year respondents had fathers with grade 9 or less. All of the respondents who did not reply or who did not know their fathers' education were second year cancelled apprentices. Respondents grouped by program year had a significant difference at the 0.05 level.

Father's Occupation

The replies to item 28 in Table 10 fell predominantly into three occupational categories: skilled tradesman, farm owner or manager, and worker (laborer, janitor, etc.). When grouped by trade, by calendar year, or by year of program, the proportion of respondents with fathers in these three occupational categories ranged from 0.56 to 0.78.

For the motor mechanics, 0.36 of the respondents stated that their fathers worked as farm managers or owners. For the carpenters, 0.28 of the respondents reported their

Table 9

RESPONSES TO ITEM 29: "HOW MUCH EDUCATION DID OR DOES YOUR FATHER HAVE?" EXPRESSED AS A PROPORTION OF N

Group	N	Less Than 7 Years	Grades 7 - 9	Grades 10 - 11	High School Graduates	Some College	University Degree	No Response
Grouped by Trade								
Carpenters	32	0.22	0.28	0.25	0.13	0.03	0.00	0.09
Electricians	35	0.31	0.23	0.14	0.11	0.14	0.00	0.06
M. Mechanics	72	0.35	0.31	0.17	0.04	0.03	0.07	0.04
Chi-square		17.19			$\chi^2_{0.05} = 21.026$			
Grouped by Calendar Year								
1968	41	0.27	0.39	0.10	0.10	0.05	0.05	0.05
1969	43	0.30	0.19	0.21	0.12	0.09	0.02	0.07
1970	55	0.35	0.27	0.22	0.04	0.04	0.04	0.05
Chi-square		9.98			$\chi^2_{0.05} = 21.026$			
Grouped by Year of Program								
2	89	0.28	0.28	0.13	0.10	0.07	0.05	0.09
3 & 4	53	0.36	0.28	0.26	0.04	0.04	0.02	0.00
Chi-square		12.12			$\chi^2_{0.05} = 11.07$			

Table 10

RESPONSES TO ITEM 28: "WHAT IS OR WAS YOUR FATHER'S OCCUPATION?" EXPRESSED AS A PROPORTION OF N

Group	N	Profes-sional	Owns or Manages Business	Office Worker	Sales	Trades-man	Owns or Manages Farm	Worker	No Response[a]
Grouped by Trade									
Carpenters	32	0.06	0.13	0.06	0.03	0.28	0.25	0.03	0.16
Electricians	35	0.00	0.09	0.03	0.06	0.23	0.23	0.26	0.11
M. Mechanics	72	0.03	0.14	0.04	0.03	0.15	0.36	0.17	0.08
Chi-square		14.16	$\chi^2_{0.05} = 23.685$						
Grouped by Calendar Year									
1968	41	0.00	0.20	0.07	0.05	0.15	0.20	0.22	0.12
1969	43	0.07	0.12	0.02	0.02	0.16	0.35	0.14	0.12
1970	55	0.02	0.07	0.04	0.04	0.27	0.35	0.13	0.09
Chi-square		14.67	$\chi^2_{0.05} = 23.685$						
Grouped by Year of Program									
2	86	0.05	0.13	0.05	0.05	0.21	0.24	0.14	0.14
3 & 4	53	0.00	0.11	0.04	0.02	0.19	0.40	0.19	0.06
Chi-square		8.75	$\chi^2_{0.05} = 14.067$						

[a] includes respondents who did not know their father's present occupation

fathers were tradesmen. A 0.26 proportion of the electricians reported their fathers were tradesmen. A very small proportion of the respondents had fathers in professional or office jobs. For the 1969 and 1970 respondents, a proportion of 0.35 had fathers who owned or managed farms. For the 1968 respondents, 0.20 had fathers who owned or managed a business. The proportion of no responses was the highest for the carpenters (0.16). This category included respondents who did not know their fathers' occupation.

The conclusions based on the data present here are reported in Chapter 7. The data provided a description of the personal characteristics of the cancelled apprentice.

CHAPTER 5

DESCRIPTION OF THE APPRENTICESHIP PERIOD

This chapter presents the findings of the cancelled apprentice dealing with his period of apprenticeship. It is organized into the following time periods:

Entering Apprenticeship

During Apprenticeship

Withdrawing from Apprenticeship

The frequency counts for all items are in the tables in Appendix 4.

Entering Apprenticeship

Items 4, 5, and 21 were designed to obtain information on why the respondents entered apprenticeship, on why they selected their trade, and on the difficulty they had obtaining their first job.

Respondents were asked to identify their reasons for entering into apprenticeship training and to list these in order of priority (first reason, second reason, and so on). Only a very few respondents had a third reason; therefore only first and second reasons were recorded. The proportions were calculated by combining the first and second reasons of the respondents (see Table 11).

So few respondents selected as their reasons three of the choices--(g) government financial assistance, (h) trades-

men are treated better than ordinary workers, and (i) no special reason--that the proportions for these categories were grouped under one heading. All reasons given in the last entry--(j) others--fitted under some other category listed in the item.

Except for one group, the 1970 respondents, over 0.80 of the respondents' answers fell under four headings: (a) required to by employer, (b) not satisfied with jobs opened to unskilled workers, (c) could earn more money if certified, and (d) being certified would increase job security. The proportion under these headings for the 1970 respondents was 0.76.

Although when grouped by calendar year the chi-square test indicated a significant degree of difference among the respondents at the 0.05 level, some of the cells contained a low proportion of the responses.

Reasons for Choosing a Particular Trade Field

As in item 4 the number of third reasons in item 5 was negligible, and the first and second reasons for choosing a trade field were combined to calculate the proportions. No respondents chose (h), no special reason, and those responses listed under (i), others, fitted into other categories.

From a inspection of Table 12, it is evident that the major reasons for respondents indenturing in a particular trade was interest in the trade itself. This is even more evident if the frequency counts are examined in Table 4.1 of Appendix 4. The overwhelming majority of respondents se-

Table 11

RESPONSES TO ITEM 4: "WHY DID YOU ENTER INTO AN APPRENTICESHIP CONTRACT?" EXPRESSED AS A PROPORTION OF THE SUM OF THE FIRST AND SECOND REASONS OF THE RESPONDENTS N

Group	N	(a) Reg. by Employer	(b) Not Satisfied with Job Openings	(c) Earn More Money	(d) Respect and Status	(e) Job Security	(f) No Interest Academic Education	Combined (g),(h),(i)
Grouped by Trade								
Carpenters	32	0.11	0.27	0.27	0.04	0.18	0.09	0.04
Electricians	35	0.16	0.31	0.25	0.04	0.09	0.09	0.06
M. Mechanics	72	0.11	0.21	0.20	0.04	0.28	0.07	0.07
Chi-square		14.11			$\chi^2_{0.05} = 21.026$			
Grouped by Calendar Year								
1968	41	0.06	0.28	0.33	0.04	0.15	0.11	0.02
1969	43	0.14	0.28	0.23	0.07	0.24	0.03	0.01
1970	55	0.14	0.06	0.23	0.01	0.23	0.09	0.12
Chi-square		32.19			$\chi^2_{0.05} = 21.026$			
Grouped by Year of Program								
2	86	0.10	0.23	0.25	0.03	0.23	0.10	0.07
3 & 4	53	0.15	0.29	0.21	0.05	0.20	0.06	0.05
Chi-square		5.58			$\chi^2_{0.05} = 12.592$			

Table 12

RESPONSES TO ITEM 5: "WHY DID YOU INDENTURE IN THIS PARTICULAR TRADE FIELD?" EXPRESSED AS A PROPORTION OF THE SUM OF THE FIRST AND SECOND REASONS OF THE RESPONDENTS N

Group	N	(a) Family In Trade	(b) Status	(c) Interest In Trade	(d) Job Opening	(e) Advancement Opportunities	(f) Vocational Trade In High School	(g) Influenced by Others
Grouped by Trade								
Carpenters	32	0.13	0.08	0.43	0.09	0.06	0.09	0.11
Electricians	35	0.09	0.04	0.50	0.06	0.15	0.04	0.13
M. Mechanics	72	0.03	0.03	0.60	0.08	0.05	0.11	0.10
Grouped by Calendar Year								
1968	41	0.09	0.03	0.59	0.03	0.07	0.09	0.10
1969	43	0.04	0.06	0.46	0.13	0.06	0.15	0.09
1970	55	0.08	0.04	0.56	0.06	0.10	0.04	0.13
Grouped by Year of Program								
2	86	0.08	0.05	0.53	0.07	0.08	0.10	0.10
3 & 4	53	0.06	0.03	0.55	0.09	0.06	0.08	0.13

lected interest in the trade as their reason for selecting a particular trade field.

Difficulty in Locating First Job

After the returns were received, there was some doubt as to whether the respondents interpreted this item as asking about their first job when entering apprenticeship or their first job after terminating their apprenticeship. Therefore the two respondents contacted in the pilot study and five other respondents were contacted by telephone. They all thought the question was asking about their first job when entering apprenticeship. Therefore the results (see Table 13) are included in this section dealing with their pre-apprentice experience rather than in a later one.

The respondents had little difficulty in obtaining their first job. The lowest proportion for the first two categories (none or very little) was 0.84 by the carpentry respondents. Whether grouped by trade, by calendar year, or by year of program at cancellation, last two categories (some or a lot) together did not in any case comprise more than 0.16 of the respondents.

During Apprenticeship

This section contains the findings dealing with the period of time the cancelled apprentice spent in the apprenticeship program. Items 6, 7, 16, 17, and 31 were designed to obtain the cancelled apprentice's opinion on his period of apprenticeship, on his course at the trade school, and on

Table 13

RESPONSES TO ITEM 21: "HOW MUCH DIFFICULTY DID YOU HAVE IN LOCATING YOUR FIRST JOB?" EXPRESSED AS A PROPORTION OF N

Group	N	None	Very Little	Some	Alot
		Grouped by Trade			
Carpenters	32	0.50	0.34	0.13	0.03
Electricians	35	0.54	0.40	0.06	0.00
Motor Mechanics	72	0.58	0.31	0.01	0.10
		Grouped by Calendar Year			
1968	41	0.61	0.37	0.00	0.02
1969	43	0.70	0.16	0.07	0.07
1970	55	0.40	0.45	0.07	0.07
		Grouped by Year of Program			
2	86	0.53	0.40	0.02	0.06
3 & 4	53	0.60	0.25	0.09	0.06
Totals	139				

his relationship with his supervisor, and to determine his "take home" pay and his need for additional financing.

Cancelled apprentices were asked to express their opinions on 11 statements concerning their period of indentureship. Table 14 contains the responses grouped by trade, Table 15 the responses grouped by calendar year, and Table 16 the responses grouped by program year.

Five statements concerned the administration of the apprenticeship program; three statements were designed to determine the cancelled apprentices' feeling about the guidance and direction received during indentureship; and three statements dealt with the formal and practical training required in apprenticeship.

Administration of the Apprenticeship Program

Table 14 shows that the majority of the respondents answered "yes" or "yes fairly" to statement (a), "the apprenticeship program satisfied my personal needs (0.75 of the carpenters, 0.74 of the electricians, and 0.82 of the motor mechanics). Proportions of the same order were obtained for statements (b) and (c), "my apprenticeship was about the right length" and "I was granted enough credit for my experience." There was no significant difference among the trades for statements (a) and (b). However, there was a significant difference among the trades in statement (c). Here 0.53 of the carpentry respondents believed they were not given enough credit for their experience.

The results for statement (j), "Apprenticeship Board examinations are a fair way of determining trade proficiency," showed there was a significant difference among the trade areas concerning attitudes toward the fairness of Apprenticeship Board examinations. Of the motor mechanics, 0.58 responded that the examinations were a fair way of determining proficiency, compared to only 0.34 and 0.31 of the carpenters and electricians, respectively. Only 0.13 of the motor mechanics answered that the examinations were not a fair indicator, compared to 0.31 of the carpenters who responded in this way.

The majority--0.53 of the carpenters, 0.51 of the electricians, and 0.60 of the motor mechanics--replied that the examinations were related to the theory taught at the trade school. There was no significant difference among the trades.

Categories (f) and (g), "there were enough visits by Apprenticeship Board field personnel" and "there was enough guidance and counselling," indicated a significant difference among the trades. By trade, 0.66 of the carpenters and 0.69 of the electricians and 0.39 of the motor mechanics replied there were not enough visits by apprenticeship personnel; 0.62 of the motor mechanics answered that there were enough or nearly enough visits. While the chi-square for item (g) indicates no significant difference, the carpentry and electrical respondents had a higher proportion of "no" responses than the motor mechanic respondents did (0.56 and 0.46 for

the carpenters and electricians respectively and 0.29 for the motor mechanics).

Statements (d), (e), and (i) asked for further evaluations of the program: "the theory taken was easily learned," "the practical training was related to modern trade practices," and "the on-the-job training period had many tasks related to the trade." Answers revealed no significant differences among the trades. The majority responded favorably to this aspect of their training.

Examining the returns by calendar year in Table 15, the results are similar to those recorded by trade area. Statements (b) on the length of apprenticeship training and (c) on credit for past experience were the only two to indicate a significant difference. Proportionally, 0.72 of the 1969 respondents answered yes to statement (b), "my apprenticeship period was about the right length," compared to 0.41 and 0.58 for the 1968 and 1970 respondents respectively. For statement (c), 0.10 of the 1968, 0.35 of the 1969, and 0.42 of the 1970 respondents replied that they did not receive enough credit for their experience.

Grouped by program year at cancellation (see Table 16), only statement (f) concerning visits by Apprenticeship Board personnel had a significant difference between respondents in the second year of their program and those in the third and fourth year. For this statement, 0.29 of the respondents in the second year and 0.43 of those in their third third and fourth year replied that the Apprenticeship Board

Table 14

RESPONSES TO ITEM 6: "DO THE...STATEMENTS EXPRESS YOUR OPINIONS DURING...INDENTURESHIP?" GROUPED BY TRADE AND EXPRESSED AS PROPORTION OF N

	(a) Satisfied Personal Needs	(b) App. Period Right Length	(c) Granted Enough Credit	(d) Theory Easy	(e) Training Modern	(f) Enough Visits By App. Board	(g) Enough Guidance & Counseling	(h) Enough Time on Job	(i) On the Job Training Related	(j) Exams Fair	(k) Exams Related to Theory
						Answered Yes					
C[a]	0.28	0.56	0.38	0.53	0.56	0.28	0.50	0.25	0.50	0.34	0.53
E[b]	0.34	0.51	0.43	0.29	0.57	0.23	0.31	0.31	0.60	0.31	0.51
M[c]	0.46	0.61	0.63	0.50	0.75	0.39	0.40	0.39	0.60	0.58	0.60
						Answered Yes Fairly					
C	0.47	0.28	0.09	0.41	0.31	0.06	0.06	0.19	0.25	0.34	0.34
E	0.40	0.31	0.29	0.51	0.29	0.09	0.31	0.23	0.26	0.46	0.43
M	0.36	0.25	0.17	0.33	0.14	0.22	0.33	0.32	0.25	0.29	0.29
						Answered No					
C	0.25	0.16	0.53	0.06	0.13	0.66	0.44	0.56	0.25	0.31	0.13
E	0.26	0.17	0.29	0.20	0.14	0.69	0.37	0.46	0.14	0.23	0.06
M	0.18	0.14	0.21	0.17	0.11	0.39	0.26	0.29	0.15	0.13	0.11
χ^2	3.55	0.93	14.65	7.24	6.10	12.48	10.19	7.59	1.87	11.09	2.59

$\chi^2_{0.05} = 9.488$

[a] Carpenters, N = 32; [b] Electricians, N = 35; [c] Motor Mechanics, N = 72

Table 15

RESPONSES TO ITEM 6: "DO THE...STATEMENTS EXPRESS YOUR OPINIONS DURING ...INDENTURESHIP?" GROUPED BY CALENDAR YEAR AND EXPRESSED AS PROPORTION OF N

	(a) Satisfied Personal Needs	(b) App. Period Right Length	(c) Granted Enough Credit	(d) Theory Easy	(e) Training Modern	(f) Enough Visits By App. Board	(g) Enough Guidance & Counseling	(h) Enough Time on Job	(i) On the Job Training Related	(j) Exams Fair	(k) Exams Related to Theory
						Answered Yes					
1968[a]	0.44	0.41	0.63	0.41	0.73	0.37	0.44	0.39	0.63	0.54	0.66
1969[b]	0.40	0.72	0.49	0.51	0.58	0.35	0.47	0.26	0.58	0.44	0.51
1970[c]	0.35	0.58	0.45	0.44	0.67	0.27	0.33	0.36	0.53	0.42	0.53
						Answered Yes Fairly					
1968	0.34	0.46	0.27	0.41	0.15	0.24	0.27	0.22	0.22	0.32	0.32
1969	0.44	0.09	0.16	0.40	0.28	0.07	0.23	0.33	0.21	0.28	0.33
1970	0.40	0.27	0.13	0.38	0.22	0.15	0.29	0.25	0.27	0.42	0.36
						Answered No					
1968	0.22	0.12	0.10	0.17	0.12	0.39	0.29	0.39	0.10	0.15	0.02
1969	0.16	0.19	0.35	0.09	0.14	0.58	0.30	0.42	0.21	0.28	0.16
1970	0.25	0.15	0.42	0.18	0.11	0.58	0.38	0.38	0.20	0.16	0.11
χ^2	2.02	14.55	12.71	1.96	2.63	7.00	2.35	2.32	2.83	4.59	5.23

$\chi^2_{0.05} = 9.448$

[a] N = 41; [b] N = 43; [c] N = 55

Table 16

RESPONSES TO ITEM 6: "DO THE...STATEMENTS EXPRESS YOUR OPINIONS DURING...INDENTURESHIP?" GROUPED BY PROGRAM YEAR AND EXPRESSED AS PROPORTION OF N

	(a) Satisfied Personal Needs	(b) App. Period Right Length	(c) Granted Enough Credit	(d) Theory Easy	(e) Training Modern	(f) Enough Visits By App. Board	(g) Enough Guidance & Counseling	(h) Enough Time on Job	(i) On the Job Training Related	(j) Exams Fair	(k) Exams Related to Theory
						Answered Yes					
2[a]	0.34	0.53	0.50	0.45	0.63	0.39	0.36	0.37	0.59	0.42	0.53
3&4[b]	0.47	0.64	0.55	0.45	0.72	0.47	0.47	0.28	0.55	0.53	0.60
						Answered Yes Fairly					
2	0.38	0.33	0.17	0.43	0.31	0.31	0.23	0.23	0.24	0.37	0.36
3&4	0.42	0.19	0.19	0.34	0.23	0.09	0.32	0.32	0.26	0.30	0.30
						Answered No					
2	0.28	0.14	0.44	0.12	0.16	0.29	0.41	0.40	0.16	0.31	0.10
3&4	0.11	0.17	0.26	0.21	0.06	0.43	0.21	0.40	0.19	0.17	0.09
χ^2	5.79	3.09	0.59	2.49	3.46	7.97	5.91	1.73	0.30	4.64	0.64

$\chi^2_{0.05} = 5.991$

[a] N = 86; [b] N = 53

field personnel did not make enough visits.

Trades School Training

Respondents had to answer seven questions for this item. Each question began, "Was the course taught at the trade school . . ."; it was completed by a word or phrase lettered from (a) to (g). See Tables 17 through 19 for responses to this item grouped by trade, by calendar year, and by program year.

Grouped by trade, five of the seven questions indicated a significant difference among the trades. These completed the question, "Was the course taught at the trade school . . .", with (a) practical, (c) well taught, (d) well equipped, (e) well staffed, and (g) generally good. However, on closer examination, the differences can be seen to be the "yes" and "fairly yes" responses. For example, in response to the question "Was the course taught in the trade school well-taught?" 0.46 of the electricians and 0.78 of the motor mechanics replied "yes," while 0.40 of the electricians and 0.15 of the motor mechanics replied "yes fairly". If these two responses are combined then 0.86 of the electricians and 0.93 of the motor mechanics answered either "yes" or "yes fairly". Looking at the "no" responses, only 0.09 of the carpenters, 0.14 of the electricians, and 0.07 of the motor mechanics responded negatively.

Four of the seven categories had significant differences when grouped by calendar year. However, when the negative responses of each category are examined and compared

Table 17

RESPONSES TO ITEM 7: "WAS THE COURSE TAUGHT AT THE TRADE SCHOOL . . . ."
GROUPED BY TRADE AND EXPRESSED AS A PROPORTION OF N

Group	N	(a) Practical	(b) Up-to-Date	(c) Well Taught	(d) Well Equipped	(e) Well Staffed	(f) Long Enough	(g) Generally Good
					Answered Yes			
Carpenters	32	0.75	0.56	0.66	0.94	0.75	0.41	0.69
Electricians	35	0.63	0.54	0.46	0.71	0.51	0.34	0.63
M. Mechanics	72	0.79	0.74	0.78	0.88	0.82	0.54	0.82
					Answered Yes Fairly			
Carpenters		0.09	0.28	0.25	0.06	0.22	0.31	0.22
Electricians		0.23	0.34	0.40	0.23	0.37	0.34	0.34
M. Mechanics		0.19	0.17	0.15	0.13	0.14	0.24	0.18
					Answered No			
Carpenters		0.16	0.16	0.09	0.00	0.03	0.28	0.09
Electricians		0.14	0.11	0.14	0.06	0.11	0.31	0.03
M. Mechanics		0.01	0.10	0.07	0.00	0.04	0.22	0.00
Chi-square $\chi^2_{0.05} = 9.488$		10.79	5.91	11.08	10.57	11.61	4.24	10.80

Table 18

RESPONSES TO ITEM 7: "WAS THE COURSE TAUGHT AT THE TRADE SCHOOL..." GROUPED BY CALENDAR YEAR AND EXPRESSED AS A PROPORTION OF N

Group	N	(a) Practical	(b) Up-to-date	(c) Well Taught	(d) Well Equipped	(e) Well Staffed	(f) Long Enough	(g) Generally Good
				Answered Yes				
1968	41	0.88	0.78	0.80	0.98	0.83	0.59	0.09
1969	43	0.74	0.53	0.60	0.86	0.77	0.47	0.70
1970	55	0.64	0.64	0.62	0.75	0.62	0.36	0.65
				Answered Yes Fairly				
1968		0.05	0.15	0.15	0.02	0.12	0.17	0.05
1969		0.12	0.28	0.23	0.14	0.16	0.16	0.26
1970		0.33	0.27	0.31	0.22	0.33	0.45	0.35
				Answered No				
1968		0.07	0.07	0.05	0.00	0.05	0.24	0.05
1969		0.14	0.19	0.16	0.00	0.07	0.37	0.05
1970		0.04	0.09	0.07	0.04	0.05	0.18	0.00
Chi-square		16.65	6.79	7.57	10.99	7.16	15.76	13.89

$\chi^2_{0.05} = 9.488$

Table 19

RESPONSES TO ITEM 7: "WAS THE COURSE TAUGHT AT THE TRADE SCHOOL . . . ."
GROUPED BY YEAR OF PROGRAM AND EXPRESSED AS A PROPORTION OF N

Group	N	(a) Practical	(b) Up-to-date	(c) Well Taught	(d) Well Equipped	(e) Well Staffed	(f) Long Enough	(g) Generally Good
				Answered Yes				
2	86	0.74	0.60	0.65	0.87	0.70	0.50	0.71
3 & 4	53	0.74	0.72	0.70	0.81	0.77	0.40	0.79
				Answered Yes Fairly				
2		0.14	0.26	0.21	0.10	0.22	0.30	0.24
3 & 4		0.25	0.21	0.28	0.19	0.21	0.25	0.21
				Answered No				
2		0.12	0.14	0.14	0.02	0.08	0.20	0.05
3 & 4		0.02	0.08	0.02	0.00	0.02	0.36	0.00
Chi-square		5.97	2.13	5.96	3.07	2.51	4.42	2.96

$\chi^2_{0.05} = 5.991$

the differences are not as great as would first appear. The "yes" and "fairly yes" categories received the majority of the responses.

When grouped by year of program at cancellation, there are no significant differences between the responses from the second year and the third and fourth year cancelled apprentices.

When grouped by trade, by calendar year, and by program year, the cancelled apprentices expressed the opinion that the course taught at the trade school was generally good. The respondents that gave a negative reply in the highest proportion were the carpenters (0.09). The motor mechanics, the 1970, and the third and fourth year respondents had no negative responses to the question as completed by (g): "Was the course taught at the trade school generally good?"

The question getting the largest proportion of negative responses was (f), "Was the course taught at the trade school long enough?" In the highest proportion (0.37) were the respondents who terminated in 1969; in the lowest proportion (0.18) were those who terminated in 1970.

On-the-Job Training

The majority of the respondents reported that they either worked well or fairly well with their immediate supervisors (see Table 20). By trade, 0.65 of the carpenters, 0.97 of the electricians, and 0.83 of the motor mechanics fit into these two categories. By calendar year, 0.90 of the

Table 20

RESPONSES TO ITEM 16: "WHAT SORT OF RELATIONSHIP DID YOU HAVE WITH YOUR IMMEDIATE SUPERVISOR DURING YOUR APPRENTICESHIP PERIOD?" EXPRESSED AS A PROPORTION OF N

Group	N	Worked well with him	Worked fairly well	Did not work well with him	No Response
Grouped by Trade					
Carpenters	32	0.56	0.09	0.19	0.16
Electricians	35	0.51	0.46	0.03	0.00
Motor Mechanics	72	0.51	0.32	0.13	0.04
Chi-square		19.10	$\chi^2_{0.05} = 12.592$		
Grouped by Calendar Year					
1968	41	0.56	0.34	0.05	0.05
1969	43	0.53	0.30	0.12	0.05
1970	55	0.49	0.27	0.16	0.07
Chi-square		3.66	$\chi^2_{0.05} = 12.592$		
Grouped by Year of Program					
2	86	0.48	0.37	0.12	0.03
3 & 4	53	0.60	0.19	0.11	0.09
Chi-square		6.68	$\chi^2_{0.05} = 7.813$		

1968, 0.80 of the 1969, and 0.76 of the 1970 respondents indicated that they worked well or fairly well with their supervisors. By year of program, 0.95 of the second year and 0.79 of the third and fourth year respondents reported that they worked well or fairly well with their immediate supervisors.

There was a significant difference among the respondents when grouped by trade. The carpenters had a proportion of 0.19 who felt that they did not work well with their supervisors; in comparison, the electricians had only 0.03. The carpenters also had the highest proportion (0.16) who did not answer this item.

The majority of the respondents replied (a) that they did not find the work as an apprentice routine or unchallenging, (b) that they did not feel they were unsuited for the work, and (c) that they were interested in the trade field (see Table 21). By trade, the motor mechanics respondents had the highest proportion (0.56) that replied "no" when asked whether they found the work routine and unchallenging. A proportion of 0.75 of the motor mechanics responded negatively to the question, "Did you find that you did not seem suited for the type of work involved?" The carpenters had the highest proportion (0.94) of "no" replies to the question asking if they found they were not interested in the trade. The electricians had the lowest proportion of negative responses to this question (0.69).

The proportions by calendar year and by program year

Table 21

RESPONSES TO ITEM 17: "DURING YOUR INDENTURESHIP, DID YOU FIND . . ."
EXPRESSED AS A PROPORTION OF N

Group	N	Work Routine and Unchall. YES	NO	SOMEWHAT	Not Suited for Work YES	NO	SOMEWHAT	Not Interested In Trade YES	NO	SOMEWHAT
Grouped by Trade										
Carpenters	32	0.25	0.47	0.28	0.13	0.69	0.19	0.06	0.94	0.00
Electricians	35	0.26	0.46	0.29	0.06	0.63	0.31	0.09	0.69	0.23
Motor Mechanics	72	0.18	0.56	0.26	0.10	0.75	0.15	0.06	0.83	0.11
Chi-square			1.15			4.45			9.27	
$\chi^2_{0.05} = 9.488$										
Grouped by Calendar Year										
1968	41	0.27	0.56	0.17	0.10	0.66	0.24	0.02	0.93	0.05
1969	43	0.21	0.42	0.37	0.09	0.77	0.14	0.07	0.84	0.09
1970	55	0.18	0.55	0.27	0.09	0.69	0.22	0.09	0.73	0.18
Chi-square			4.99			1.65			6.67	
$\chi^2_{0.05} = 9.448$										
Grouped by Year of Program										
2	86	0.28	0.51	0.21	0.09	0.67	0.23	0.07	0.80	0.13
3 & 4	53	0.11	0.51	0.38	0.09	0.75	0.15	0.06	0.85	0.09
Chi-square			7.57			1.38			0.50	
$\chi^2_{0.05} = 5.991$										

were similar. The replies indicated a high degree of interest by cancelled apprentices in their chosen trade during their apprenticeship period. The only question that had any significant difference in response was, "Did you find your work routine and unchallenging?" with the difference existing between the second year respondents and the third and those in the fourth year.

Fifty-five (or 0.40) of the 139 respondents required additional financial assistance. The electricians had the highest proportion among the trade required financial assistance (0.46). When grouped by calendar year, the 1969 respondents had the highest proportion (0.49) of those requiring financial assistance. The second and the third and fourth year respondents both had the same proportion requiring financial assistance (0.40). The results are shown in Table 22.

There were no significant differences among any of the groups.

The financial assistance came from three main sources --loans, wife working, and part-time work. In general, as shown in Table 23, loans and wife working obtained the highest proportions. The chi-square test of significance could not be applied to this second part of item 31 because of the small numbers per cell.

Table 22

RESPONSES TO ITEM 31: "DURING YOUR APPRENTICESHIP PERIOD AT THE TRADES TRAINING SCHOOL, DID YOU RECEIVE FINANCIAL ASSISTANCE IN ADDITION TO THE REGULAR SUBSISTANCE ALLOWANCE?" EXPRESSED AS A PROPORTION OF N

Group	N	Yes	No
Grouped by Trade			
Carpenters	32	0.34	0.66
Electricians	35	0.46	0.54
Motor Mechanics	72	0.39	0.61
Chi-square		0.93	
$\chi^2_{0.05}$ = 5.991			
Grouped by Calendar Year			
1968	41	0.34	0.66
1969	43	0.49	0.51
1970	55	0.36	0.64
Chi-square		2.29	
$\chi^2_{0.05}$ = 5.991			
Grouped by Year of Program			
2	86	0.40	0.60
3 & 4	53	0.40	0.60
Chi-square		0.00	
$\chi^2_{0.05}$ = 3.841			

Table 23

RESPONSES TO ITEM 31, SECOND PART: SOURCE OF FINANCIAL ASSISTANCE OF RESPONDENTS WHO RECEIVED AID DURING PERIOD AT TRADES SCHOOL IN ADDITION TO MANPOWER ASSISTANCE. EXPRESSED AS A PROPORTION OF N

Group	N	Loan	Aid From Parents	Wife Working	Part-time Work
			Grouped by Trade		
Carpenters	11	0.55	0.09	0.18	0.18
Electricians	16	0.19	0.06	0.50	0.25
Motor Mechanics	28	0.39	0.04	0.36	0.21
			Grouped by Calendar Year		
1968	14	0.14	0.07	0.57	0.21
1969	21	0.48	0.05	0.29	0.19
1970	20	0.40	0.05	0.30	0.25
			Grouped by Year of Program		
2	34	0.38	0.09	0.41	0.12
3 & 4	21	0.33	0.00	0.29	0.38

Withdrawing from Apprenticeship

Seven items covered apprentices' reasons for withdrawing from apprenticeship, their employment at time of withdrawal, and related questions.

Reasons for Withdrawing

The first and second reasons for withdrawing shown in Tables 4.14 and 4.15 of Appendix 4 were added together to obtain the proportions shown in Table 24. Respondents were asked to give additional reasons for withdrawing; however, few gave more than two reasons.

Three reasons for withdrawing, (d) unable to secure steady employment, (e) unable to earn a decent living, and (g) opportunity for better position elsewhere, totaled more than 0.50 of the responses. This was the result by trade, by calendar year, and by program year. Reason (e), not able to earn a decent living, had a slightly higher proportion than either (d) or (g). None of the other reasons for withdrawing had a proportion higher than 0.16, and most were in the order of 0.04 to 0.09.

The category "other reasons" (k) is included in the table under the heading "went into Other Trade," as this was the reason specified by those respondents who selected (k).

The chi-square test indicated a significant difference in the respondents grouped by trade at the 0.05 level. However, a number of the cells had a frequency count of less than 5. No significant difference was found by calendar year or by program year.

Table 24

RESPONSES TO ITEM 8: "WHAT WERE YOUR REASONS FOR WITHDRAWING FROM THE APPRENTICESHIP PROG?" EXPRESSED AS A PROPORTION OF THE SUM OF THE FIRST AND SECOND REASONS

Group	N	Failing or Theory Diff.	Lack of Interest	No Adv. in Cert.	No Steady Employment	Not a Decent Liv.	Poor Wking Conditions	Better Opport.	No on-the-job train.	Foreman Problems	Poor Health	Went into other trade
Grouped by Trade												
Carp.	32	0.00	0.00	0.02	0.22	0.20	0.16	0.13	0.04	0.09	0.07	0.07
Elect.	35	0.10	0.14	0.02	0.19	0.17	0.07	0.17	0.05	0.05	0.03	0.00
M. Mech.	72	0.04	0.06	0.07	0.11	0.26	0.05	0.21	0.05	0.08	0.05	0.03
Chi-square			32.09									
$\chi^2_{0.05}$ = 31.410												
Grouped by Calendar Year												
1968	41	0.08	0.09	0.06	0.15	0.18	0.11	0.17	0.08	0.05	0.05	0.00
1969	43	0.01	0.04	0.03	0.16	0.28	0.10	0.16	0.06	0.03	0.09	0.04
1970	55	0.06	0.07	0.05	0.15	0.23	0.04	0.23	0.02	0.10	0.02	0.04
Chi-square			20.07									
$\chi^2_{0.05}$ = 31.410												
Grouped by Year of Program												
2	86	0.04	0.06	0.04	0.15	0.21	0.08	0.18	0.07	0.07	0.06	0.04
3 & 4	53	0.07	0.08	0.06	0.16	0.25	0.07	0.19	0.02	0.05	0.02	0.01
Chi-square			8.45									
$\chi^2_{0.05}$ = 19.675												

Employment at Time of Withdrawal

Item 10 was divided into two parts, (a) and (b). The results of 10(a) Table 25, show that by trade 0.78 of the carpenters, 0.83 of the electricians, and 0.79 of the motor mechanics were employed when they withdrew. There was no significant difference among the trades.

The 1970 respondents had an unemployment rate of 0.31 compared to 0.15 and 0.12 for the 1968 and 1969 respondents respectively. The chi-square test indicated a significant difference at the 0.05 level.

By program year at cancellation there was no significant difference, with a "yes" answer from 0.81 of the second year respondents and from 0.77 of the third and fourth year respondents.

The results of 10(b), Table 26, show that the proportion of respondents who experienced unemployment of longer than 13 weeks after withdrawal was small. The electricians had the highest proportion who were unemployed for 13 weeks or over (0.17). The carpenters and the 1968 and 1969 respondents had no one unemployed for 13 weeks or longer. Because of the small number, chi-squares were not calculated for item 10(b).

The majority of respondents when grouped by trade worked 24 months or less with the employer with whom they were apprenticed (0.56 of the carpenters, 0.57 of the electricians, and 0.67 of the motor mechanics, see Table 27).

Table 25

RESPONSES TO ITEM 10(a): "WERE YOU EMPLOYED WHEN YOU WITHDREW . . . ." EXPRESSED AS A PROPORTION OF N

Group	N	Yes	No
Grouped by Trade			
Carpenters	32	0.78	0.22
Electricians	35	0.83	0.17
Motor Mechanics	72	0.79	0.21
Chi-square		0.28	
$\chi^2_{0.05} = 5.991$			
Grouped by Calendar Year			
1968	41	0.85	0.15
1969	43	0.88	0.12
1970	55	0.69	0.31
Chi-square		6.67	
$\chi^2_{0.05} = 5.991$			
Grouped by Year of Program			
2	86	0.81	0.19
3 & 4	53	0.77	0.23
Chi-square		0.33	
$\chi^2_{0.05} = 3.841$			

Table 26

RESPONSES TO ITEM 10(b): "HOW LONG WERE YOU UNEMPLOYED BEFORE YOU WITHDREW?"
EXPRESSED AS A PROPORTION OF N

Group	N	Duration of Unemployment in Weeks		
		1 to 6	7 to 12	13 or Over
Grouped by Trade				
Carpenters	7	0.43	0.57	0.00
Electricians	6	0.43	0.33	0.17
Motor Mechanics	13	0.67	0.27	0.07
Grouped by Calendar Year				
1968	6	0.67	0.33	0.00
1969	5	0.40	0.60	0.00
1970	17	0.59	0.29	0.12
Grouped by Year of Program				
2	16	0.50	0.44	0.06
3 & 4	12	0.67	0.25	0.08

Table 27

RESPONSES TO ITEM 11: "HOW LONG DID YOU WORK FOR THE EMPLOYER WITH WHOM YOU WERE INDENTURED?" EXPRESSED AS PROPORTION OF N

Group	N	Time with Employer in Months: 12 or Less	13 - 24	25 - 36	37 - 48	Over 48
Grouped by Trade						
Carpenters	32	0.22	0.34	0.41	0.00	0.03
Electricians	35	0.23	0.34	0.17	0.06	0.20
Motor Mechanics	72	0.36	0.31	0.11	0.06	0.17
Chi-square		18.08				
$\chi^2_{0.05}$ = 15.507						
Grouped by Calendar Year						
1968	41	0.32	0.22	0.20	0.05	0.22
1969	43	0.21	0.40	0.26	0.02	0.12
1970	55	0.35	0.35	0.15	0.05	0.11
Chi-square		8.17				
$\chi^2_{0.05}$ = 15.507						
Grouped by Year of Program						
2	86	0.33	0.33	0.19	0.02	0.14
3 & 4	53	0.25	0.32	0.21	0.08	0.15
Chi-square		2.90				
$\chi^2_{0.05}$ = 9.488						

Of the respondents employed for over 48 months with the employer with whom they were indentured, the electricians had 0.20 and the motor mechanics 0.17; in comparison the carpenters had a proportion of only 0.03. At the 0.05 level, there was a significant difference among the trades.

By calendar year, a proportion of over 0.60 of the 1969 and 1970 respondents were with their indenturing employer for 24 months or less. A 0.54 proportion of the 1968 respondents stayed 24 months or less with their indenturing employer. The chi-square test did not indicate any significant difference by calendar year.

The pattern for the respondents grouped by year of program was similar to that of the respondents when grouped by trade and by calendar year. The second year respondents had 0.14 and the third and fourth had 0.15 who were with their indenturing employer for over 48 months. Some of the respondents indicated they were still with their same employer. There was no significant difference between the respondents when grouped by program year.

Approximately 50% of the respondents said they would not return to the firm with which they were indentured. By trade, 0.59 of the carpenters, 0.43 of the electricians, and 0.49 of the motor mechanics said they would not return. By calendar year and by year of program, the proportions were similar (see Table 28).

A number of the respondents answered that they did not know what they would do. For example, 0.37 of the elec-

Table 28

RESPONSES TO ITEM 12: ". . . WOULD YOU RETURN TO THE FIRM IN THE SAME OR AT A HIGHER POSITION?" EXPRESSED AS A PROPORTION OF N

Group	N	Yes	No	Don't Know
Grouped by Trade				
Carpenters	32	0.34	0.59	0.16
Electricians	35	0.20	0.43	0.37
Motor Mechanics	72	0.28	0.49	0.24
Chi-square		4.71		
$\chi^2_{0.05} = 9.488$				
Grouped by Calendar Year				
1968	41	0.34	0.56	0.10
1969	43	0.26	0.49	0.26
1970	55	0.24	0.40	0.36
Chi-square		8.93		
$\chi^2_{0.05} = 9.488$				
Grouped by Year of Program				
2	86	0.27	0.52	0.21
3 & 4	53	0.28	0.40	0.32
Chi-square		2.76		
$\chi^2_{0.05} = 5.991$				

tricians, 0.36 of the 1970 respondents, and 0.32 of the third and fourth year respondents checked off the "don't know" category.

There was no significant difference by trade, by calendar year, or by program at cancellation.

Item 13 asked, "Were you offered steady employment with your employer at time of withdrawal?" As indicated in Table 29, categories (a), (b), and (d) were the ones selected by the large majority of the respondents--"yes at higher wages," "yes at equal wages," and "no." By trade, 0.50 of the carpenters, 0.57 of the electricians, and 0.57 of the motor mechanics responded they were offered continuing employment either at higher or at equal wages.

By calendar year and by year of program at cancellation, all groups of respondents excepting those in the 1970 group had over 0.50 answering that they had been offered employment at higher or equal wages. The proportion of 1970 respondents answering yes was only 0.44, with 0.49 answering no.

At the 0.05 level, the chi-square test indicated no significant difference in the groups by trade, by calendar year, or by program year.

While there were extremes at both ends of the salary scale, the bulk of the respondents had "take home" pay in the ranges of $51 to $75 and $76 to $100 as shown in Table 30. By trade, the electricians and motor mechanics had a proportion of 0.83 in these two ranges, and the car-

Table 29

RESPONSES TO ITEM 13: "WERE YOU OFFERED STEADY EMPLOYMENT WITH YOUR EMPLOYER AT TIME OF WITHDRAWAL?" EXPRESSED AS A PROPORTION OF N

Group	N	Yes at Higher Wages	Yes at Equal Wages	Yes at Less Wages	No
Grouped by Trade					
Carpenters	32	0.19	0.31	0.03	0.47
Electricians	35	0.23	0.34	0.06	0.37
Motor Mechanics	72	0.17	0.40	0.03	0.40
Chi-square		2.04			
$\chi^2_{0.05}$ = 12.592					
Grouped by Calendar Year					
1968	41	0.12	0.49	0.00	0.39
1969	43	0.23	0.42	0.02	0.33
1970	55	0.20	0.24	0.07	0.49
Chi-square		11.35			
$\chi^2_{0.05}$ = 12.592					
Grouped by Year of Program					
2	86	0.20	0.35	0.02	0.42
3 & 4	53	0.17	0.40	0.06	0.38
Chi-square		1.57			
$\chi^2_{0.05}$ = 7.815					

Table 30

RESPONSES TO ITEM 18: "WHEN YOU WITHDREW FROM THE APPRENTICESHIP PROGRAM YOUR WEEKLY 'TAKE HOME' PAY WAS:" EXPRESSED AS A PROPORTION OF N

Group	N	$50 or below	$51 to $75	$76 to $100	$101 to $125	$126 or above
Grouped by Trade						
Carpenters	32	0.03	0.31	0.41	0.22	0.03
Electricians	35	0.06	0.34	0.49	0.06	0.06
Motor Mechanics	72	0.07	0.39	0.44	0.06	0.04
Chi-square		8.43				
$\chi^2_{0.05} = 15.507$						
Grouped by Calendar Year						
1968	41	0.07	0.41	0.39	0.07	0.05
1969	43	0.09	0.28	0.47	0.12	0.05
1970	45	0.02	0.38	0.47	0.09	0.04
Chi-square		4.72				
$\chi^2_{0.05} = 15.507$						
Grouped by Year of Program						
2	86	0.07	0.36	0.48	0.08	0.01
3 & 4	53	0.04	0.36	0.40	0.11	0.09
Chi-square		6.61				
$\chi^2_{0.05} = 9.488$						

Range = 132 Mean = $80

penters had 0.72. By calendar year, the proportion for these two ranges were 0.80 for the 1968 respondents, 0.74 for those in the 1969 group, and 0.85 for the 1970 respondents. By program year the proportions were 0.84 for the second year and 0.76 for the third and fourth year respondents. There was no significant difference at the 0.05 level by trade, by calendar year, or by year of program at cancellation.

The range of "take home" pay for all the respondents was 132, and the mean "take home" pay was $80 per week. The only figures available for comparison at the time of writing were the weekly rates for carpenters, electricians, and labors in Edmonton on October 1, 1969. The Dominion Bureau of Statistics (1971) reported the following average weekly rates for a 40-hour week: carpenters, $168; electricians, $182; and laborers, $130. Even with allowance for deductions, the laborer's salary would be higher than the apprentices.

The Cancelling Process

Approximately one-third of the respondents discussed their plans to cancel their apprenticeship with the Apprenticeship Board and with their employer. Examining the results in Table 31 by trade, by calendar year, and by program year, the lowest proportion that answered yes to these two categories (Apprenticeship Board and employer) was 0.29 by the 1970 respondents, and the highest, 0.38, by the carpenters.

Table 31

RESPONSES TO ITEM 30: "DID YOU DISCUSS YOUR PLANS TO CANCEL YOUR APPRENTICESHIP WITH ..." EXPRESSED AS A PROPORTION OF N

Group	N	Apprenticeship Board			Employer			Trades School		
		Yes	No	Don't Remember	Yes	No	Don't Remember	Yes	No	Don't Remember
Grouped by Trade										
Carpenters	32	0.38	0.56	0.06	0.34	0.66	0.00	0.13	0.84	0.03
Electricians	35	0.34	0.63	0.03	0.31	0.63	0.06	0.03	0.97	0.00
Motor Mechanics	72	0.32	0.56	0.13	0.33	0.56	0.11	0.14	0.78	0.08
Chi-square		3.25			4.44			7.37		
$\chi^2_{0.05} = 9.488$										
Grouped by Calendar Year										
1968	41	0.29	0.63	0.07	0.37	0.63	0.00	0.02	0.98	0.00
1969	43	0.35	0.56	0.09	0.35	0.60	0.05	0.16	0.81	0.02
1970	55	0.36	0.55	0.09	0.29	0.56	0.15	0.13	0.76	0.11
Chi-square		0.84			8.13			11.81		
$\chi^2_{0.05} = 9.488$										
Grouped by Year of Program										
2	86	0.36	0.57	0.07	0.35	0.58	0.07	0.08	0.86	0.06
3 & 4	53	0.30	0.58	0.11	0.30	0.62	0.08	0.15	0.81	0.04
Chi-square		1.06			0.33			1.83		
$\chi^2_{0.05} = 5.991$										

Few of the respondents discussed their plans to cancel with personnel at the trades training school. The highest proportion that answered yes was 0.16 for the 1969 respondents and the lowest, 0.02 for the 1968 respondents.

Only one group in one category showed any significant difference among the respondents--the respondents grouped by calendar year in the "Trades School" category.

The conclusions based on the data presented here are reported in Chapter 7. The data provided a description of the cancelled apprentices' reasons for entering, opinions during, and reasons for leaving the apprenticeship period.

CHAPTER 6

DESCRIPTION OF THE PERIOD FOLLOWING APPRENTICESHIP

This chapter presents the findings of the cancelled apprentice dealing with that period immediately following the termination of his training agreement. The data are organized into three related parts. The first focuses on the cancelled apprentices' efforts to be reinstated in an apprenticeable trade program, the second part reports his work history in terms of employment and unemployment, and the third reports the findings of his current work status.

Re-registration in an Apprenticeship Program

A 0.28 proportion of the respondents were either reinstated or re-registered in a trade. However, as shown in Table 34, only 0.07 of the respondents eventually became qualified journeymen.

Examination of the responses to item 1 (Table 32) shows that, by trade, the motor mechanics had the highest proportion (0.33) reinstated or re-registered. By calendar year, the highest proportion of respondents to be reinstated or re-registered was 0.37 by the 1969 respondents. By program year, 0.32 of the third and fourth year respondents were reinstated or re-registered, compared to 0.26 for the second year respondents. There was no significant difference

the groups by trade, by calendar year, or by program year at cancellation.

Table 32

RESPONSES TO ITEM 7: "HAVE YOU BEEN REINSTATED IN THE SAME TRADE OR RE-REGISTERED IN ANOTHER TRADE?" EXPRESSED AS A PROPORTION OF N

Group	N	Yes	No
Grouped by Trade			
Carpenters	32	0.25	0.75
Electricians	35	0.20	0.80
Motor Mechanics	72	0.33	0.67
Chi-square		2.27	
$\chi^2_{0.05} = 5.991$			
Grouped by Calendar Year			
1968	41	0.22	0.78
1969	43	0.37	0.63
1970	55	0.25	0.75
Chi-square		2.73	
$\chi^2_{0.05} = 5.991$			
Grouped by Year of Program			
2	86	0.26	0.74
3 & 4	53	0.32	0.68
Chi-square		0.69	
$\chi^2_{0.05} = 3.841$			

The majority of the respondents who re-registered did so only once. All respondents of two groups, the electricians and the third and fourth year respondents, replied they were re-registered only once. The lowest proportion that

re-registered and that did so only once, was 0.67 of the 1968 respondents. Because of the small numbers involved, the chi-square was not calculated. Results are in Table 33.

Table 33

RESPONSES TO ITEM 2: "HOW MANY TIMES HAVE YOU BEEN RE-REGISTERED OR REINSTATED . . ." EXPRESSED AS A PROPORTION OF N

Group	N	Number of Times 1	2	No Response
Grouped by Trade				
Carpenters	8	0.75	0.25	0.00
Electricians	7	1.00	0.00	0.00
Motor Mechanics	24	0.88	0.04	0.08
Grouped by Calendar Year				
1968	9	0.67	0.33	0.00
1969	16	0.94	0.00	0.06
1970	14	0.93	0.00	0.07
Grouped by Year of Program				
2	22	0.77	0.14	0.09
3 & 4	17	1.00	0.00	0.00

Table 34 divides the respondents who re-registered or were reinstated into two categories: those who re-registered in a related or in the same trade, and those who did not. The assistance of personnel at the Provincial Apprenticeship Board was used to determine whether the trade was related to the three trades in this study. The majority who re-registered or were reinstated did so in the same or a

related trade (0.63 for the carpenters, 0.71 for the electricians, and 0.67 for the motor mechanics).

Table 34

DISTRIBUTION OF RESPONDENTS WHO RE-REGISTERED OR WERE REINSTATED INTO RELATED OR NOT RELATED TRADES

Group	N	Related	Not Related	No Response
		Grouped by Trade		
Carpenters	8	0.63	0.38	0.00
Electricians	7	0.71	0.29	0.00
Motor Mechanics	24	0.67	0.25	0.08

The replies to item 3 (Table 35) showed that few of the respondents became registered tradesmen (0.06 for the carpenters, 0.03 for the electricians, and 0.10 for the motor mechanics). There was no significant difference among respondents grouped by trade.

Table 35

RESPONSES TO ITEM 3: "HAVE YOU SUBSEQUENTLY BECOME A QUALIFIED JOURNEYMAN?" EXPRESSED AS A PROPORTION OF N

Group	N	Yes	No
		Grouped by Trade	
Carpenters	32	0.06	0.94
Electricians	35	0.03	0.97
Motor Mechanics	72	0.10	0.90
Totals	139	0.07	0.93
Chi-square		1.72	

$\chi^2_{0.05} = 5.991$

Employment History

Time to Obtain First Job

Ninety-six (0.69) of the respondents either were not offered steady employment or left the employer with whom they were indentured. However, it is obvious from Table 36 that these 96 respondents obtained jobs quite readily. The lowest proportion to obtain a job in six weeks or less was 0.89 for the 1970 respondents. Only 0.07 took 13 weeks or over to obtain a job. There was no significant difference among any of the groups.

Wages

In most cases as shown in Table 37, over 0.50 of the respondents received higher wages once they obtained a job or returned to the same job after withdrawing. Only the carpenters, with a proportion of 0.47, had less than 0.50 who received higher wages. The 1969 respondents had the highest proportion of respondents who received higher wages (0.67).

Approximately one-third of the respondents returned to work for equal wages. The highest proportion was 0.38 for the third and fourth year respondents and the lowest was 0.21 for the 1969 respondents.

The respondents grouped by trade had a significant difference at the 0.05 level. The carpenters had a proportion of 0.22 who returned to a job or obtained another job for lower wages, compared to a proportion of 0.06 for the electricians and the motor mechanics.

Table 36

RESPONSES TO ITEM 14: "IF YOU WERE NOT OFFERED STEADY EMPLOYMENT OR LEFT EMPLOYMENT, HOW SOON AFTER WITHDRAWING DID YOU GET A JOB?"
EXPRESSED AS PROPORTION OF N

Group	N	Time in Weeks 0-6	7-12	13 and over
Grouped by Trade				
Carpenters	22	0.95	0.05	0.00
Electricians	23	0.96	0.00	0.04
Motor Mechanics	51	0.92	0.04	0.04
Chi-square			1.89	
$\chi^2_{0.05} = 9.488$				
Grouped by Calendar Year				
1968	25	1.00	0.00	0.00
1969	23	0.96	0.04	0.00
1970	42	0.89	0.05	0.07
Chi-square			4.89	
$\chi^2_{0.05} = 9.488$				
Grouped by Year of Program				
2	54	0.91	0.06	0.04
3 & 4	42	0.98	0.00	0.02
Chi-square			2.58	
$\chi^2_{0.05} = 5.991$				

Table 37

RESPONSES TO ITEM 15: "ONCE YOU OBTAINED A JOB, OR RETURNED TO THE SAME JOB, DID YOU RECEIVE . . ."
EXPRESSED AS A PROPORTION OF N

Group	N	Higher Wages	Equal Wages	Less Wages
Grouped by Trade				
Carpenters	32	0.47	0.31	0.22
Electricians	35	0.57	0.37	0.06
Motor Mechanics	72	0.68	0.26	0.06
Chi-square			9.62	
$\chi^2_{0.05} = 9.488$				
Grouped by Calendar Year				
1968	41	0.59	0.37	0.05
1969	43	0.67	0.21	0.12
1970	55	0.56	0.33	0.11
Chi-square			3.68	
$\chi^2_{0.05} = 9.488$				
Grouped by Year of Program				
2	86	0.63	0.26	0.12
3 & 4	53	0.57	0.38	0.06
Chi-square			3.06	
$\chi^2_{0.05} = 5.991$				

Number of Jobs

Item 19 asked about the number of jobs held since withdrawing; item 20 asked for the shortest and the longest period of time on these jobs. See Tables 38 - 40. The number who stated in item 19 (see Table 38) that they held more than one job was 69. However, the proportion of no responses to the two parts of item 20 was high (see Tables 39 and 40). Part (a) asked for "the shortest period . . . on a job" and part (b) for "the longest period . . . on a job." By trade, 0.20 of the carpenters and 0.22 of the electricians did not respond to items 20 (a) and 20 (b). The motor mechanics had a low proportion of no responses (0.08). By calendar year and by year of program only the 1968 respondents had a low proportion of no responses (0.04).

Table 38 with the responses to item 19 shows that 0.22 of the carpenters held only one job since withdrawing compared to 0.49 and 0.64 for the electricians and motor mechanics respectively. There was a significant difference among the respondents grouped by trade.

By calendar year, 0.44 of the 1968 and 1970 respondents and 0.65 of the 1969 respondents had only one job since withdrawing. By program year, 0.41 of the second year and 0.66 of the third and fourth year respondents held only one job since withdrawing.

For item 20(a), as recorded in Table 39, at least 0.50 of all groups except the carpenters (0.44) and the 1969 respondents (0.47) replied that their shortest time on the

Table 38

RESPONSES TO ITEM 19: "SINCE WITHDRAWING FROM THE PROGRAM HOW MANY JOBS HAVE YOU HELD, INCLUDING THE PRESENT ONE?" EXPRESSED AS A PROPORTION OF N

Group	N	Number of Jobs: One	Two	Three	Four	Five or More
Grouped by Trade						
Carpenters	32	0.22	0.38	0.22	0.13	0.06
Electricians	35	0.49	0.23	0.29	0.00	0.00
Motor Mechanics	72	0.64	0.17	0.13	0.03	0.04
Chi-square			24.27			
$\chi^2_{0.05}$ = 15.507						
Grouped by Calendar Year						
1968	41	0.44	0.20	0.27	0.02	0.07
1969	43	0.65	0.19	0.14	0.00	0.02
1970	55	0.44	0.29	0.16	0.09	0.02
Chi-square			13.63			
$\chi^2_{0.05}$ = 15.507						
Grouped by Year of Program						
2	86	0.41	0.28	0.22	0.06	0.03
3 & 4	53	0.66	0.15	0.13	0.02	0.04
Chi-square			9.08			
$\chi^2_{0.05}$ = 9.488						

Table 39

RESPONSES TO ITEM 20(a): "IF YOU HELD MORE THAN ONE JOB, ABOUT WHAT WAS THE SHORTEST PERIOD OF TIME THAT YOU HAD BEEN ON A JOB?"
EXPRESSED AS A PROPORTION OF N

Group	N	Shortest Period on the Job in Weeks 1-12	13-24	25-36	37 and over	No Response
Grouped by Trade						
Carpenters	25	0.44	0.12	0.12	0.12	0.20
Electricians	18	0.61	0.11	0.00	0.06	0.22
Motor Mechanics	26	0.56	0.12	0.08	0.16	0.08
Grouped by Calendar Year						
1968	23	0.57	0.22	0.00	0.17	0.04
1969	15	0.47	0.00	0.20	0.20	0.13
1970	31	0.53	0.10	0.07	0.03	0.27
Grouped by Year of Program						
2	51	0.54	0.14	0.06	0.08	0.18
3 & 4	18	0.50	0.06	0.11	0.22	0.11

Table 40

RESPONSES TO ITEM 20(b): " IF YOU HELD MORE THAN ONE JOB, ABOUT WHAT WAS THE LONGEST PERIOD OF TIME YOU HAD BEEN ON A JOB?"
EXPRESSED AS A PROPORTION OF N

Group	N	Longest Period on the Job in Months 1-12	13-24	25-36	37 and over	No Response
		Grouped by Trade				
Carpenters	25	0.20	0.28	0.12	0.20	0.20
Electricians	18	0.22	0.22	0.22	0.11	0.22
Motor Mechanics	26	0.31	0.27	0.15	0.19	0.08
		Grouped by Calendar Year				
1968	23	0.00	0.35	0.17	0.43	0.04
1969	15	0.27	0.33	0.27	0.00	0.13
1970	31	0.42	0.16	0.10	0.06	0.26
		Grouped by Year of Program				
2	51	0.22	0.24	0.20	0.18	0.18
3 & 4	18	0.33	0.33	0.06	0.17	0.11

job was 1 to 12 weeks. Item 20(b), the longest period on a job, had the highest proportion in the first two categories (1 to 12 months and 13 to 24 months, see Table 40). The 1968 respondents had a proportion of 0.43 having 37 months or over on a job. The 1970 respondents had 0.06 with 37 months or over on a job. This is a discrepancy since these respondents withdrew in 1970 and the survey was carried out only one year later, in 1971.

Unemployment

Table 41 shows that the proportion of respondents experiencing unemployment was 0.30 or greater. The carpenters had a proportion of 0.66 experiencing unemployment since withdrawing, compared to 0.31 and 0.38 for the electricians and motor mechanics respectively.

By calendar year, 0.39 of the 1968 respondents, 0.30 of the 1969 respondents, and 0.53 of the 1970 respondents experienced some unemployment after withdrawal. By program year, the proportions were 0.48 for the second year respondents and 0.32 for the third and fourth year respondents.

The second part of item 22 concerned the number of times the respondents were unemployed and how long they were unemployed for each time. Table 5.10, Appendix 5, contains the frequency count for this part of the question. Table 42 gives the length of time the respondents were unemployed during the first time out of work after withdrawal. The majority were out of work only 1 to 6 weeks. The highest proportion in the 1 to 6 week category was 0.90 for the 1970

Table 41

RESPONSES TO ITEM 22: "SINCE WITHDRAWING HAVE YOU BEEN UNEMPLOYED AT ANY TIME?" EXPRESSED AS A PROPORTION OF N

Group	N	Yes	No
Grouped by Trade			
Carpenters	32	0.66	0.34
Electricians	35	0.31	0.69
Motor Mechanics	72	0.38	0.62
Chi-square		9.23	
$\chi^2_{0.05}$ = 5.991			
Grouped by Calendar Year			
1968	41	0.39	0.61
1969	43	0.30	0.70
1970	55	0.53	0.47
Chi-square		5.20	
$\chi^2_{0.05}$ = 5.991			
Grouped by Year of Program			
2	86	0.48	0.52
3 & 4	53	0.32	0.68
Chi-square		3.28	
$\chi^2_{0.05}$ = 3.841			

Table 42

NUMBER OF WEEKS OUT OF WORK DURING FIRST TIME UNEMPLOYED AFTER WITHDRAWAL EXPRESSED AS A PROPORTION OF N

Group	N	1 - 6 Weeks	7 - 12 Weeks	13 Weeks or Over
Grouped by Trade				
Carpenters	21	0.76	0.14	0.10
Electricians	11	0.82	0.09	0.09
Motor Mechanics	26	0.73	0.23	0.04
Grouped by Calendar Year				
1968	16	0.75	0.13	0.13
1969	13	0.46	0.54	0.00
1970	29	0.90	0.03	0.07
Grouped by Year of Program				
2	41	0.78	0.17	0.05
3 & 4	17	0.71	0.18	0.12

respondents, and the lowest was 0.46 for the 1969 respondents. The 1969 respondents had 0.54 of the respondents unemployed for between 7 to 12 weeks. This was the highest proportion in this time category.

Present Work Status

Job of Respondents at Time of Study

Approximately one-third of the respondents by trade, by calendar year, and by program year had jobs at the time of the study that were related to the trade in which they were indentured. As shown in Table 43, the "somewhat related" category had a small proportion, leaving approximately two-thirds of the respondents in the "not related" category. The chi-square was small, indicating no significant difference among the respondents by trade, by calendar year, or by year of program at cancellation.

The Dictionary of Occupational Titles was used to determine the "best fit" of the jobs listed by the respondents.

Take Home Pay from Present Job

There was a wide range in the amount of "take home" pay of the respondents at the time of the study. As indicated in Table 44, most of the respondents (approximately one-third) had weekly "take home" pay in the $101 - $125 range. The carpenters had 0.34 in this pay range, the electricians 0.37, and the motor mechanics 0.38. The 1968 respondents had 0.46 in this range, the 1969 respondents 0.30, and the 1970 respondents 0.35. The second year respondents

Table 43

RESPONSES TO ITEM 23: "WHAT KIND OF A JOB ARE YOU HOLDING DOWN NOW?"
EXPRESSED AS A PROPORTION OF N

Group	N	Classification of Position at Time of Study as Related to Trade Indentured in: Related to Trade	Somewhat Related	Not Related
Grouped by Trade				
Carpenters	32	0.34	0.06	0.59
Electricians	35	0.31	0.03	0.66
Motor Mechanics	72	0.33	0.04	0.63
Chi-square		0.61		
$\chi^2_{0.05}$ = 9.488				
Grouped by Calendar Year				
1968	41	0.34	0.05	0.61
1969	43	0.30	0.02	0.67
1970	55	0.35	0.05	0.60
Chi-square		0.98		
$\chi^2_{0.05}$ = 9.488				
Grouped by Year of Program				
2	86	0.33	0.05	0.63
3 & 4	53	0.34	0.04	0.62
Chi-square		0.08		
$\chi^2_{0.05}$ = 5.991				

Table 44

RESPONSES TO ITEM 24: "ABOUT HOW MUCH ARE YOUR WEEKLY EARNINGS (TAKE HOME PAY) AT YOUR PRESENT JOB?" EXPRESSED AS A PROPORTION OF N

		Weekly Take Home Pay						
Group	N	$75 or below	$76-$100	$101-$125	$126-$150	$151-$175	$176-$200	$201 and Over
					Grouped by Trade			
Carp.	32	0.06	0.16	0.34	0.09	0.22	0.03	0.09
Elect.	35	0.09	0.11	0.37	0.20	0.17	0.00	0.06
M.Mech.	72	0.03	0.32	0.38	0.10	0.10	0.01	0.07
					Grouped by Calendar Year			
1968	41	0.05	0.10	0.46	0.12	0.12	0.02	0.12
1969	43	0.05	0.30	0.30	0.09	0.19	0.00	0.07
1970	55	0.05	0.27	0.35	0.15	0.13	0.02	0.04
					Grouped by Year of Program			
2	86	0.05	0.27	0.40	0.10	0.14	0.00	0.05
3 & 4	53	0.06	0.17	0.32	0.15	0.15	0.04	0.11
	Range		195			Mean	$124	

had 0.40 in the same range and the third and fourth year respondents 0.32.

The range for the "take home" of item 24 was 195 and the mean was $124.

Job Satisfaction

Each respondent was asked to rate four statements about his job on a five-point scale, with five being the highest rating. The ratings were summed, and if the total was between 15 and 19, inclusive, the respondent was considered to have a high opinion of his job. If the total was between 10 and 14, inclusive, the respondent was considered to have a medium opinion of his job. A total of 5 - 9, inclusive, meant the respondent had a low opinion of his job at the time of the study (see Table 45).

By trade, 0.63 of the carpenters, 0.54 of the electricians, and 0.58 of the motor mechanics had a high opinion of their job. By calendar year, 0.66 of the 1968 respondents, 0.49 of the 1969 respondents, and 0.60 of the 1970 respondents had a high opinion of their job at the time of the study.

The respondents when grouped by year of program at cancellation had a significant difference at the 0.05 level. The second year respondents had a proportion of 0.48 with a high opinion of their job, while the third and fourth year respondents had a proportion of 0.75 in this category.

Ownership of Property

The majority of the respondents (0.90) owned a car at

Table 45

RESPONSES TO ITEM 25: "HOW DO YOU FEEL ABOUT YOUR PRESENT JOB?" EXPRESSED AS A PROPORTION OF N

Group	N	Rating of Present Position: High	Medium	Low
Grouped by Trade				
Carpenters	32	0.63	0.16	0.22
Electricians	35	0.54	0.37	0.09
Motor Mechanics	72	0.58	0.31	0.11
Chi-square $\chi^2_{0.05} = 9.488$		5.72		
Grouped by Calendar Year				
1968	41	0.66	0.27	0.07
1969	43	0.49	0.40	0.12
1970	55	0.60	0.22	0.18
Chi-square $\chi^2_{0.05} = 9.488$		6.02		
Grouped by Year of Program				
2	86	0.48	0.36	0.16
3 & 4	53	0.75	0.17	0.08
Chi-square $\chi^2_{0.05} = 5.991$		10.42		

the time of the study. Considerably fewer than one-half of the respondents owned a house (0.37), and only 0.28 owned other property. The results are shown in Table 46.

By trade, 0.43 of the motor mechanics owned a house and 0.33 owned other property. Of the carpenters 0.28 owned a house and 0.19 owned other property. Of the electricians a proportion of 0.31 owned a house and 0.26 owned other property.

By calendar year, the 1969 respondents had the highest proportion of ownership in all categories. The third and fourth year respondents had a higher proportion owning a car (0.92) and a house (0.34) than the second year respondents did.

Benefits of Apprenticeship Training

Four questions concerned the respondents' perceptions of the benefits of completing an apprenticeship program even though they had not done so. The results are recorded by trade in Table 47. When asked if they believed they could have earned more money if they had completed their apprenticeship, 0.81 of the carpenters answered yes, compared to 0.83 of the electnicians, and 0.57 of the motor mechanics. The proportions of yes responses to the question "Do you believe you would have obtained more promotion?" were 0.50 for the carpenters, 0.40 for the electricians, 0.44 for the motor mechanics.

These first two--(a) more money earned and (b) more promotion achieved--showed a significant difference among the

Table 46

RESPONSES TO ITEM 32: "DO YOU OWN . . .?"
EXPRESSED AS A PROPORTION OF N

Group	N	A Car		A House		Other Property	
		Yes	No	Yes	No	Yes	No
Grouped by Trade							
Carpenters	32	0.94	0.06	0.28	0.72	0.19	0.81
Electricians	35	0.89	0.11	0.31	0.69	0.26	0.74
Motor Mechanics	72	0.89	0.11	0.43	0.57	0.33	0.67
Grouped by Calendar Year							
1968	41	0.85	0.15	0.34	0.66	0.24	0.76
1969	43	0.93	0.07	0.42	0.58	0.35	0.65
1970	55	0.91	0.09	0.35	0.65	0.25	0.75
Grouped by Year of Program							
2	86	0.88	0.12	0.34	0.66	0.28	0.72
3 & 4	53	0.92	0.08	0.42	0.58	0.28	0.72
Totals	139	0.90	0.10	0.37	0.63	0.28	0.72

Table 47

RESPONSES TO ITEM 9: "IF YOU HAD COMPLETED YOUR APPRENTICESHIP, DO YOU BELIEVE THAT YOU WOULD HAVE . . ." EXPRESSED AS A PROPORTION OF N

		Earned More Money			Obtained More Promotion			Gained More Respect			Obtained Employ-ment Easier		
Group	N	Yes	No	No Idea	Yes	No	No Idea	Yes	No	No Idea	Yes	No	No Idea
Carp.	32	0.81	0.19	0.00	0.50	0.28	0.22	0.38	0.31	0.31	0.38	0.41	0.22
Elect.	35	0.83	0.17	0.00	0.40	0.29	0.31	0.29	0.37	0.34	0.46	0.31	0.23
M. Mech.	72	0.57	0.31	0.13	0.44	0.46	0.10	0.28	0.44	0.28	0.49	0.35	0.17
Chi-square		13.84			9.73			2.12			1.61		

$\chi^2_{0.05} = 9.488$

respondents by trade.

The answers to "Do you believe that you would have gained more respect?" were divided fairly evenly among "yes," "no," and "no idea". Each received approximately one-third of the responses. The last statement, "Do you believe you would have obtained employment easier?" had slightly higher positive responses, 0.38 for the carpenters, 0.46 for the electricians, and 0.49 for the motor mechanics.

A proportion of 0.28 of the carpenters, 0.23 of the electricians, and 0.24 of the motor mechanics said they could not perform their job at the time of the study without having had apprenticeship training (see Table 48). By calendar year 0.27 of the 1968 respondents answered that they required their apprenticeship training. By program year, 0.28 of the second year and 0.19 of the third and fourth year needed their apprenticeship training to perform their job.

As shown in Table 49, approximately one-quarter of the respondents made additional comments on various phases of the apprenticeship program.

Of those who commented, the electricians had the highest proportion who commented favorably (0.23). They were followed by the third and fourth year respondents with a proportion of 0.21. In unfavorable comments, the carpenters had the highest proportion of all groups (0.22). By calendar year, the favorable and unfavorable comments were fairly evenly divided.

Table 48

RESPONSES TO ITEM 26: "COULD YOU PERFORM YOUR PRESENT JOB IF YOU DID NOT HAVE APPRENTICESHIP TRAINING?" EXPRESSED AS A PROPORTION OF N

Group	N	Yes	Yes but Training help	No
Grouped by Trade				
Carpenters	32	0.56	0.16	0.28
Electricians	35	0.54	0.23	0.23
Motor Mechanics	72	0.51	0.25	0.24
Chi-square		1.22		
$\chi^2_{0.05} = 9.488$				
Grouped by Calendar Year				
1968	41	0.49	0.24	0.27
1969	43	0.58	0.23	0.19
1970	55	0.53	0.20	0.27
Chi-square		1.45		
$\chi^2_{0.05} = 9.488$				
Grouped by Year of Program				
2	86	0.52	0.20	0.28
3 & 4	53	0.55	0.26	0.19
Chi-square		1.78		
$\chi^2_{0.05} = 5.991$				

Table 49

RESPONSES TO ITEM 33: "WOULD YOU CARE TO ADD ADDITIONAL COMMENTS . . . "
EXPRESSED AS A PROPORTION OF N

Group	N	No Additional Comment	Comment	
			Favorable	Unfavorable
Grouped by Trade				
Carpenters	32	0.69	0.09	0.22
Electricians	35	0.71	0.23	0.06
Motor Mechanics	72	0.78	0.13	0.10
Grouped by Calendar Year				
1968	41	0.73	0.15	0.12
1969	43	0.74	0.14	0.12
1970	55	0.75	0.15	0.11
Grouped by Year of Program				
2	86	0.74	0.10	0.15
3 & 4	53	0.74	0.21	0.06

The conclusions based on the data presented here are presented in Chapter 7. The data provided a description of the cancelled apprentices' attitudes towards his incompleted training program, as well as his employment history since cancellation.

CHAPTER 7

SUMMARY, CONCLUSIONS, DISCUSSION

Summary

The Problem

The main purpose of this study was to describe apprentices in Alberta who cancelled in the trade areas of carpentry, electrical construction, and motor mechanics during the years 1968, 1969, and 1970.

The specific objectives were:

1. To determine why apprentices cancelled their apprenticeship agreement
2. To describe cancelled apprentices by trade, by number of years in apprenticeship training, and by calendar year of cancellation
3. To present a demographic description of those who cancelled based on age; marital status at indenture; education; father's education; father's occupation; and financial position
4. To determine why cancelled apprentices decided to enter an apprenticeship program in carpentry, electrical construction, or motor mechanics
5. To determine the attitude of cancelled apprentices toward their period of indentureship and toward

present employment

Procedure

The description of cancelled apprentices was based on data from the files of the Alberta Apprenticeship Board and from the questionnaire developed for the study. The 33-item questionnaire was sent to 238 former apprentices who had registered in carpentry, electricity, or motor mechanics in either 1968, 1969, or 1970 but cancelled their contract before completing their training. There were 139 returns, representing at 58.4% return. Frequencies of the responses to the items of the questionnaire were tabulted and recorded in Appendices 3, 4, and 5. The frequency counts expressed as proportions were included in the text of Chapters 4, 5, and 6. Chi-square was calculated for most items to determine differences in frequency distributions. Null hypotheses were rejected at the 0.05 level of significance.

Analyses of the data from the Provincial Apprenticeship Board and from the questionnaire were presented in Chapters 4, 5, and 6.

Findings

Personal Characteristics--

1. The average age of the cancelled apprentices was 23.2 years.

2. The majority of the cancelled apprentices attained more than a grade 9 level of education but did not graduate from high school.

3. While most of the respondents did not receive technical training in high school, 0.22 of the motor mechanics received at least 20 credits in automotive training in high school. The proportion that did not receive 20 credits in any of the areas mentioned in item 27--0.44 for the carpenters and 0.47 for the motor mechanics--indicates that high school probably did not provide the orientation to their chosen trade.

4. The percentage of the cancelled apprentices that were single at the time of indenturing was 58.2%. The carpenters had the highest percentage who were single (69.3%). At the time the questionnaire was circulated, 32.1% of the respondents were single.

5. Approximately one-third of the respondents had fathers who had not completed grade 7. Few fathers were high school graduates and a miniscule number had fathers with university degrees.

6. Fathers of the motor mechanics respondents had less education than did fathers of electricians and the carpenters.

7. The electricians had a higher proportion (0.14) of fathers with some college than the other two trades had (0.03).

8. The respondents came mainly from families in which the father was a tradesman or was the owner or manager of a farm. Few had fathers who were professional or office workers (high proportion 0.07).

9. Generally, the cancelled apprentices did not fail their last Apprenticeship Board examinations before terminating.

The Apprenticeship Period--

1. There were two main reasons for entering apprenticeships: respondents were not satisfied with jobs open to unskilled workers and they believed they could earn more money if they became journeymen.

2. A low proportion (approximately 0.09) entered because of disinterest in high school or university. Few entered apprenticeship because they believed they would gain respect as a journeyman, or because of the financial assistance given by the government.

3. For the electricians, 0.16 were required to enter apprenticeship by their employer, compared to 0.11 for the carpenters and the motor mechanics.

4. The incentive of job security for entering apprenticeship was of particular importance to the motor mechanics (proportionally, 0.28).

5. The choice of a particular trade field was made because of interest in that particular trade.

6. Some (0.09 to 0.13) were influenced by their choice of a trade by others--relatives or friends--and about the same proportion chose a particular trade because members of their families were in that trade.

7. The respondents had little or no difficulty in obtaining their first job as an apprentice.

8. The respondents expressed satisfaction with a number of aspects of their apprenticeship. They believed the program satisfied their personal needs, the apprenticeship period was about the right length, the theory taken was easily learned, and the Apprenticeship Board examinations were related to theory taken at the trade school.

9. Especially among the carpenters there was dissatisfaction with the amount of credit given for experience. A proportion of 0.53 of the carpenters felt they did not receive enough credit.

10. Respondents were critical of the amount of guidance and counselling received during apprenticeship; some of them specified that there were not enough visits by the Apprenticeship Board field personnel. A proportion of 0.44 of the carpenters and 0.37 of the electricians stated that there was not enough guidance and counselling. A high proportion (0.56 of the carpenters and 0.46 of the electricians) responded that there was not enough supervised training on the job.

11. There was a significant difference among the trades in response to the following four statements: (a) "I was granted enough credit for my experience", (b) "There were enough visits by Apprenticeship Board field personnel", (c) "There was enough guidance and counselling", and (d) "Apprenticeship Board examinations are a fair way of determining trade proficiency".

12. By calendar year there was a significant difference in the responses in two statements: (b) "The apprenticeship program satisfied my personal needs" and (c) "I was granted enough credit for my experience". There was only one statement showing a significant difference among the respondents grouped by program year at cancellation: (f) "There were enough visits by Apprenticeship Board field personnel".

13. For the periods of apprenticeship spent at a trades training institution, a high degree of satisfaction among the respondents was revealed. This was true for all questions asked in item 7 except for statement (f) "Was the course taught at the trade school long enough to permit coverage of content?" Here a proportion in the order of 0.30 indicated the course was not long enough.

14. A number of questions in item 7 had a significant difference among the respondents at the 0.05 level. However, the difference appeared to be a result of the differences between the "yes" and "yes fairly" responses. With these two responses summed, the proportions among the respondents were closer.

15. The majority of the respondents either worked well or worked fairly well with their supervisor during their apprenticeship. The carpenters had the highest proportion (0.19) who did not work well with their supervisor. They also had the highest proportion 0.16) of the respondents who did not respond to item 16.

16. There was significant difference among the respondents grouped by trade and by calendar year for item 16, which asked the ex-apprentices about their relationship with their supervisor during apprenticeship training.

17. On the whole the respondents found their work during apprenticeship interesting and challenging, and in addition they found they were suited to the type of work involved. A high proportion (over three-quarters) were still interested in the trade in which they had been indentured.

18. By trade, by calendar year, and by program year at cancellation, approximately one-third of the respondents needed financial assistance in addition to the Canada Manpower assistance received during their period at the trades training school.

19. Most of those who received extra financial assistance while at the trades school did so through loans, wife working, and part-time work. For the carpenters, 0.55 of the respondents had to get a loan.

20. There were three predominant reasons given for withdrawing: (a) respondents were unable to secure steady employment during apprenticeship, (b) they were unable to earn a decent living, and (c) they received a better position elsewhere.

21. The proportion of respondents unemployed at withdrawal varied from 0.15 to 0.31. The 1970 respondents had the highest number unemployed and the 1968 the lowest. The proportions for the three trades were similar.

22. Over one-half of the respondents worked 24 months or less for the employer with whom they were indentured at the time of study. Approximately one-third of the motor mechanics, the 1968 and 1970 respondents, and the respondents in the second year of their program worked 12 months or less for the employer with whom they were indentured.

23. When grouped by trade, there was a significant difference among the respondents in length of time spent with employer at indenture.

24. Approximately one-half of the respondents when grouped by trade, by calendar year, or by program year, were offered steady employment with their employer at the time of withdrawal. The offer of employer was at equal or higher wages. This would indicate that many left their employer voluntarily, since 0.15 to 0.31 stated they were unemployed at the time of withdrawing.

25. The mean "take home" pay of the respondents while indentured was $80 per week and the range was 132.

26. Whether grouped by trade, by calendar year, or by year of program, approximately one-third of the respondents discussed their plans to cancel their contract with both the Apprenticeship Board and their employer. Few discussed their plans with personnel at the trade school. This means that the majority of the respondents either did not seek or were unable to obtain guidance from these three sources.

Present Work Status--

1. Many of those unemployed at withdrawal found another job within one to six weeks. However, 0.57 of the carpenters and 0.60 of the 1969 respondents were unemployed for between 7 and 12 weeks. A proportion of 0.17 of the electricians were unemployed for 13 weeks or over.

2. By a majority of nearly two to one, respondents did not want to return to the firm with which they had been indentured at the time of withdrawal, even if that return meant they would be given a higher position.

3. The majority of the respondents did not get reinstated or did not re-register in another trade. However, 0.33 of the motor mechanics, 0.37 of the 1969 respondents, and 0.32 of the third and fourth year respondents were either reinstated or re-registered in a trade. Many of the motor mechanics who re-registered did so in the Heavy Duty Equipment Trade. In total, 39 of the 139 respondents returned to apprenticeship at least once.

4. Few of those who re-registered or became reinstated did so more than once. Only the carpenters and the 1968 respondents had a significant number who registered more than once, the carpenters with a 0.25 proportion and the 1968 group with a 0.33 proportion registering twice.

5. Over 0.63 of those who were reinstated or re-registered did so in the same trade or in a trade related to the one they were registered in before.

6. In general, the respondents did not subsequently become qualified journeymen. Only 0.06 of the carpenters, 0.03 of the electricians, and 0.10 of the motor mechanics who responded had become journeymen by the time of the study.

7. Respondents in the following category found other jobs quite readily: those whose employers did not offer them steady employment, or who for other reasons left the employer with whom they were indentured.

8. Respondents who stayed with or left their employer did so for higher wages. Over 0.50 of the respondents in this category obtained a job with higher wages.

9. There was a significant difference among the respondents by trade concerning salaries received after withdrawal. A proportion of 0.22 of the carpenters returned to or obtained a job at a lower rate of pay, compared to 0.06 of the electricians and the motor mechanics.

10. A high proportion of the carpenters (0.78) had more than one job since withdrawing and 0.40 of the carpenters had three jobs or more. The carpenters changed jobs more often than the electricians, who had a proportion of 0.49 with only one position since withdrawal, and the motor mechanics, who had a proportion of 0.64 holding only one job since withdrawal. There was a significant difference among the respondents grouped by trade.

11. By program year at cancellation, the results show the third and fourth year respondents as holding fewer jobs than the second year respondents, with 0.66 holding only one

job compared to 0.41 for the second year respondents.

12. Generally the respondents who held more than one job since withdrawing held one of those jobs for only one to twelve weeks and held another one for over a year. The 1970 respondents had the highest proportion (0.53) who had a job for only one to twelve weeks and they also had the highest proportion (0.42) whose longest period on a job since withdrawing was a year or less. A proportion of 0.16 of the 1970 respondents said they had held a job for 25 months or longer since withdrawing. This was a discrepancy since the survey was carried out a year after their withdrawal from apprenticeship, in June of 1971.

13. A high proportion of the cancelled apprentices were affected by unemployment after withdrawal, with the carpenters having a considerable higher proportion suffering unemployment (0.66) than the electricians and the motor mechanics did (0.31 and 0.38 respectively). The difference was significant at the 0.05 level.

14. The large majority of the respondents who were unemployed found themselves without a job for six weeks or less. Few were unemployed for over 12 weeks.

15. Eighty-seven (or 0.62) of the 139 respondents did not, at the time of the study, hold jobs related to the trade in which they were indentured.

16. The average "take home" pay of the respondents was higher at the time of the study than when they withdrew from apprenticeship, even allowing for rises in the cost of living.

17. The respondents had a high opinion of their job at the time of the study. The groups having the highest proportions with a low opinion of their job were the carpenters (0.22), the 1970 respondents (0.18), and the second year respondents (0.16). There was a significant difference between the second and the third and fourth year respondents.

18. Approximately one third of the respondents owned a house or property other than a car.

19. The carpenters and electricians believed they would have earned more money if they had become certified, but only 0.57 of the motor mechanics held this opinion. There was a significant difference among the respondents when grouped by trade.

20. The respondents were divided on their answers when asked if they believed they would have (a) obtained more promotions, (b) gained more respect, and (c) obtained employment easier if they had completed apprenticeship. The proportion who believed they would have obtained more promotions varied from 0.40 to 0.50. Only 0.28 of the motor mechanics and 0.38 of the carpenters believed they would have gained more respect. However, 0.49 of the motor mechanics and only 0.38 of the carpenters believed they would have gained employment easier.

21. Over one-half of the respondents replied they could perform their job at the time of the study if they had not had apprenticeship training. Approximately one-quarter of the respondents needed the apprenticeship training to

perform their job.

22. Of the 0.26 who made additional comments, the division between favorable and unfavorable comments varied considerably by trade and by calendar year. The third and fourth year respondents had the highest proportion who commented favorably (0.21). The carpenters had the highest proportion with complaints (0.22).

23. The majority of the complaints involved on-the-job training, job conditions, and salaries of apprentices. The cancelled apprentices would like to see improved on-the-job instruction and a greater variety of jobs while training. They were of the opinion that journeymen working on the job should have more time to help train apprentices. Many complained that employers were using apprentices as a cheap source of labor. Nearly all who commented unfavorably claimed that they still liked the trade in which they were indentured.

Conclusions

The rate of returns on the survey was only 58%, placing limitations on the generalizations that can be made. Nevertheless, the following conclusions were reached for the participants of this study.

1. The person enrolling in an apprenticeship program who eventually drops out is one who has not completed his secondary education. He is approximately 23 years old and single. His father has a relatively low educational level and holds a job as a laborer, tradesman, or farm worker.

2. There is a discrepancy between the reasons for selecting an apprenticeship and the practice of apprenticeship as viewed by the cancelled apprentice. That is to say, the person enters with the expectation of better pay and job security. Yet he finds that as an indentured apprentice, his pay is less than he can obtain when he leaves apprenticeship. He, also, has periods of unemployment during his apprenticeship program.

3. The cancelled apprentice is not antagonistic toward the apprenticeship method of training. While he is positive towards the trade school part of his program, he believes the on-the-job training of his apprenticeship lacks provincial monitoring. This often results in his performing unchallenging tasks which do not necessarily reflect skills performed by journeymen.

4. Persons who have cancelled their apprenticeship program are unlikely to return to an apprenticeship system of training.

5. A partially completed apprenticeship program is a real value in the securing and holding of subsequent jobs to approximately 25% of those who cancelled.

6. The main causes of cancellation are found in economic factors: unemployment, poor wages, and the immediate attraction of a job with better pay. While the cancelled apprentice does receive a job with better pay, he still encounters periods of unemployment. In addition, his pay is not that much greater, and as a result, his economic

gains are not great in terms of major acquisitions such as a house and other property.

Discussions

This study supports the findings of other studies on apprenticeship discontinuance. Both the U.S. Department of Labor (1960) and Johnson (1968) found that the main reasons for discontinuance were (1) inability to secure steady employment, (2) inability to earn a decent living, and (3) the attraction of a better job elsewhere. Bernier (1971) agreed with these reasons, and in addition, described the cancelled apprentice as a person who had not completed secondary school and who came from a family with a relatively low social and economic status.

The study reported here provides an accurate picture of the cancelled apprentices in Alberta, and therefore, accomplished a major purpose of the study. That was to provide a data base upon which improvements in apprenticeship programs could be developed.

The purpose of the study was not to provide solutions to the problem of apprenticeship discontinuance. However, there is little doubt in the investigator's mind that solutions to the apprenticeship discontinuance problem which do not include increased pay, improved on-the-job training, and continuous employment during indentureship will have little likelihood of succeeding.

The Apprenticeship Board should play a more active role in providing information and counselling to persons

seeking to enter an apprenticeship agreement. Prospective apprentices should be well informed before deciding upon apprenticeship and upon a particular trade. In addition, guidance and counselling should be provided during the apprenticeship period and apprentices should be encouraged to complete their apprenticeship program.

It is recommended that improvements in on-the-job training procedures, methods, and conditions be made. To insure good trade training on the job, the following points might be considered.

1. A more specific on-the-job training program should be provided for all trades. The program should require the apprentice to perform a variety of jobs and tasks. The tasks and skills required of a journeyman should form the training program. If it is not possible for one employer to provide this training, perhaps apprenticeship should be planned to include more than one employer.

2. Close cooperation between employer and trade school would assist in the transfer of the theoretical training to the practical application.

3. More supervision of training while on the job should be provided to ensure that training is taking place. Larger companies might employ a training officer, while smaller companies might provide training for foreman and journeyman in the training of apprentices.

4. Since economic factors are a major cause of cancellation, consideration must be given to:

Providing security of employment during apprenticeship

Providing adequate wages and training allowances during apprenticeship

Providing more incentive for apprentices to finish their apprenticeship program

The scope of this study was rather limited--limited to three trade areas, to three years, to one province, and to those who completed at least one year of their apprenticeship program. There were no comparisons made between those who cancelled their apprenticeship and those who completed. Former apprentices who left the province had to be omitted from the study because information on their whereabouts was unavailable. Because the Apprenticeship Board does not keep a record of apprentices who cancelled during or after their first year of training, these cancelled apprentices also had to be left out of the study.

Useful studies could be carried out in areas of apprenticeship covering:

the structure and content of the on-the-job portion of the apprenticeship program;

the quality of guidance and counselling throughout indentureship;

the solution to financial problems faced by the apprentice during his training.

REFERENCES

Apprenticeship Training Committee Report. 46th annual meeting of the Canadian Construction Association. The Labor Gazette, 1964, LXIV (3), 190-192.

Bernier, J. Apprenticeship in Quebec: Factors determining enrolment and drop-out. Unpublished report for the Department of Manpower and Immigration, Government of Canada, and Provincial Apprenticeship Boards, 1971.

Christian, D. E. The national apprenticeship program: Unfinished business. Part IV in An assessment of apprenticeship. Monthly Labor Review, 1964, 87(6), 625-632.

Coombs, J., & Cooley, W. W. Dropouts: In high school and after high school. American Educational Research Journal, 1968, 5, 343-363.

Department of Manpower and Immigration. Preliminary report on apprenticeship in Canada: May 1968. Ottawa, 1968.

Department of Manpower and Immigration. Training Questionnaire. A research questionnaire developed for a survey of the Canada Manpower training program January 1-September 30, 1969. Ottawa, 1968.

Dominion Bureau of Statistics. Canada year book 1970-71. Queen's Printer. Ottawa, 1971.

Drinkwater, W. S. (Ed.) Two advisory bodies to minister marking 20th anniversaries. The Labor Gazette, 1963, LXIII(5), 361.

Drinkwater, W. S. (Ed.) Federal-provincial labour conference. The Labor Gazette, 1964, LXIV(4), 264-268.

Farber, D. J. Apprenticeship in the United States: Labor market forces and social policy. Proceedings from a conference on apprenticeship training at Madison September 8-9, 1966. Madison: The Center for Studies in Vocational and Technical Education, University of Wisconsin, 1967. ERIC ED018632.

Feisel, J. S. Unemployment of youth in Great Britain and the United States. In The transistion from school to work. A report based on the Princeton manpower symposium, Princeton, N.J.: Princeton University, 1968. p.p. 119-131.

Ferguson, G. A. Statistical analysis in psychology and education. New York: McGraw-Hill, 1966.

Fleming, W. G. & Eastwood, G. R. A follow up study of students who entered employment immediately after leaving school. Report No. 10 in Atkinson study of utilization of student resources, Toronto: Department of Educational Research, Ontario College of Education, 1963.

Foltman, F. F. Apprenticeship and skill training-a trial balance. Part I in An assessment of apprenticeship. Monthly Labor Review, 1964, 87(1), 28-35.

Ford, C. R. Technical and vocational education. An unpublished paper presented June 1962.

Foster, H. G. Nonapprentice sources of training in construction. Monthly Labor Review, 1970, 93(2), 21-31.

Freund, J. E. Modern elementary statistics. Englewood Cliffs, N. J.: Prentice-Hall, 1967.

Goldstein, H. Youth in the labor markets: Trends in employment and unemployment. In The transition from school to work. A report based on the Princeton manpower symposium, Princeton, N. J.: Princeton University, 1968 p.p. 20-46.

Groemping, F. A. Transistion from school to work in selected countries. In The transistion from school to work. A report based on the Princeton manpower symposium, Princeton University, 1968, p.p. 132-188.

Groom, P. Statistics on apprenticeship and their limitations. Part III in An assessment of apprenticeship. Monthly Labor Review. 1964, 87(4), 391-395.

Hall, O., & McFarline, B. Transistion from school to work. Ottawa: Department of Labor, 1962.

Hamel, H. R. Employment of high school graduates and dropouts. Monthly Labor Review, 1966, 89(6), 643-649.

International Labor Organization. European apprenticeship. CIRF Monographs, Geneva, 1966. 1(No.2).

Johnson, R. W. Some dimensions of dropout problem in apprenticeship training. Fredericton: New Brunswick Department of Labor, 1967.

Johnson, R. W. A second look at the dropout problem in apprenticeship training. Fredericton: New Brunswick Department of Labor, 1968.

Johnson, R. W. Is apprenticeship seen as worthwhile? Fredericton: New Brunswick Department of Labor, 1970.

Mack, B. J. A follow-up study of the 1967 and 1968 graduates of the Edmonton public school pre-employment program. Unpublished master's thesis, University of Alberta, 1969.

Muir, J. D. Impact of specialization upon apprenticeship as a system of training. Unpublished report for the Department of Manpower and Immigration, Government of Canada, and the Apprenticeship Branch, Department of Labor, Province of Alberta, 1971.

Murphy, H. A perspective on apprenticeship today. Proceedings from a conference on apprenticeship training at Madison September 8-9, 1966. Madison: The Center for Studies in Vocational and Technical Education, University of Wisconsin, 1967. ERIC ED018632.

Penner, H. P. Factors, frequency and consequences of students who dropped out of Valleyview Junior and Senior High Schools. Unpublished master's thesis, University of Alberta, 1970.

Provincial Apprenticeship Board. Training today for tomorrow! Edmonton: Alberta Department of Labor, 1966.

Provincial Apprenticeship Board. Annual report of apprenticeship training: 1968. Edmonton: Alberta Department of Labor, 1968. (a)

Provincial Apprenticeship Board. Interprovincial certificates for tradesmen-the red seal program. Edmonton: Alberta Department of Labor, 1968. (b)

Provincial Apprenticeship Board. Annual report of apprenticeship training: 1969. Edmonton: Alberta Department of Labor, 1969.

Provincial Apprenticeship Board. Annual report of apprenticeship training: 1970. Edmonton: Alberta Department of Labor, 1970. (a)

Provincial Apprenticeship Board. Apprenticeship newsletter. Edmonton: Alberta Department of Labor, 1970. (b)

Provincial Apprenticeship Board. Is apprenticeship for you? Edmonton: Alberta Department of Labor, 1970. (c)

Rancier, G. J. Ten cases of high school dropouts in the Acadia School Division. Unpublished master's thesis, University of Alberta, 1962.

Riche, M. F. Public policies and programs. Part II in An Assessment of apprenticeship. Monthly Labor Review, 1964, 87(2), 143-148.

Schill, W. J., & Arnold, J. P. Curricula content for six technologies. Urbana, III.: Bureau of Educational Research and Department of Vocational and Technical Education, University of Illinois, 1965.

Schrieber, D., Kaplan, B. A., & Strom, R. D. Dropout studies-Design and conduct. Washington, D.C.: National Education Association, 1965.

Scragg, E. S. A survey of dropouts from Alberta Schools 1963 to 1968. Unpublished master's thesis, University of Alberta, 1968.

Survey of the results of training on the Canadian Manpower training program January 1-September 30, 1969. A report tabled in the House of Commons by the Honourable Allan J. MacEachen. Ottawa: June 1970.

Thompson, M. L., & Nelson, R. H. Twelve approaches to remedy the dropout problem. Clearing House, 1963, 38(12), 200.

U.S. Department of Labor, Bureau of Apprenticeship and Training. A Follow-up study of former apprentices. Technical Bulletin No. T-143, Washington, D.C., 1954.

U.S. Department of Labor, Bureau of Apprenticeship and Training. Career patterns of former apprentices. Bulletin No. T-147, Washington, D.C., 1959.

U.S. Department of Labor, Bureau of Apprenticeship and Training. Apprentice dropouts in the construction industry. Washington, D.C., 1960.

U.S. Department of Labor. Dictionary of occupational titles, Vol. II(3rd ed.). Washington, D.C., 1965.

Van Hestern, F. N. Factors related to educational noncontinuance. Unpublished master's thesis, University of Alberta, 1969.

Varner, S. E. School dropouts. Washington, D.C.: Research Division, National Education Association, 1967.

Vincent, G. B. Vocational and economic success of male high school dropouts. Unpublished master's thesis, University of Alberta, 1965.

Whiteley, T. W. My friend-The dropout. The School Guidance Worker, 1967, 22(6), 14-18.

APPENDIX 1

QUESTIONNAIRE

INFORMATION QUESTIONNAIRE

This questionnaire is for RESEARCH PURPOSES. The information you provide will be used for that purpose only and will remain confidential.

Address:	Telephone No.
Maritial Status: M ___ S ___ W ___ D ___ Sep. ___	
Number of Children _____	

A. APPRENTICESHIP PROGRAM

1. Since cancelling your apprenticeship contract, have you been re-instated in the same trade or re-registered in another trade?

   YES ☐ NO ☐

2. How many times have you been re-instated or re-registered and in what trade programs?

   (a) ONE TRADE _____ (b) TWO TRADE _____

   (c) THREE TRADE _____ (d) FOUR OR MORE TRADES _____

   _____ _____

   _____ _____

   _____

3. Have you subsequently become a qualified journeyman (either provincial certification or red seal certification)?

   YES ☐ NO ☐

   in trade ↓ _____

4. Why did you enter into an apprenticeship contract? Contract referred to is the one you had cancelled. If you have more than one reason, indicate your first (1), second (2), third (3), and other reasons in order of importance.

		Selection
(a)	required to by employer	( )
(b)	not satisfied with jobs opened to unskilled workers	( )
(c)	could earn more money if certified	( )
(d)	could gain respect and status if a skilled worker	( )
(e)	being certified would increase job security	( )
(f)	not interested in high school or university education	( )
(g)	financial assistance given by government during training period	( )
(h)	tradesmen are treated better than ordinary workers	( )

(i) no special reason - ( )
(j) others (please specify) _____ ( )

_____ ( )

_____ ( )

5. Why did you indenture in this particular trade field? If you have more than one reason indicate your first (1), second (2), third (3), or other reasons.

(a) other members of the family in the trade - - - - - - - - - - - ( )
(b) trade has a high professional status - - - - - - - - - - - - - ( )
(c) interest in the trade itself - - - - - - - - - - - - - - - - - ( )
(d) there just happened to be a job opened in the trade - - - - - ( )
(e) trade has good oppotunities for advancement - - - - - - - - - ( )
(f) had vocational training in field in high school - - - - - - - ( )
(g) influenced by parent, friend, relative or other - - - - - - - ( )
(h) no special reason - ( )
(i) others (please specify) _____ ( )

_____ ( )

_____ ( )

6. Do the following statements express your opinions during your period of indentureship?
Please check appropriate box.

	YES	YES FAIRLY	NO
(a) The apprenticeship program satisfied my personal needs.	☐	☐	☐
(b) My apprenticeship period was about the right length.	☐	☐	☐
(c) I was granted enough credit for my experience.	☐	☐	☐
(d) The theory taken was easily learned.	☐	☐	☐
(e) The practical training was related to modern trade practices.	☐	☐	☐
(f) There were enough visits by Apprenticeship Board field personnel.	☐	☐	☐
(g) There was enough guidance and counselling.	☐	☐	☐
(h) There were enough supervised training periods on the job.	☐	☐	☐
(i) The on-the-job training period had many tasks related to the trade.	☐	☐	☐

(j) Apprenticeship Board examinations are a fair way of determining trade proficiency.	☐	☐	☐
(k) Apprenticeship Board examinations were related to theory taken at the trade school.	☐	☐	☐

7. Was the course taught at the trade school

	YES	YES FAIRLY	NO
(a) practical	( )	( )	( )
(b) up-to-date	( )	( )	( )
(c) well taught	( )	( )	( )
(d) well provided with equipment and supplies	( )	( )	( )
(e) staffed with well qualified teachers	( )	( )	( )
(f) long enough to permit adequate coverage of content	( )	( )	( )
(g) generally good	( )	( )	( )

8. What were your reasons for withdrawing from the apprenticeship program? If you had more than one reason, indicate your first (1), second (2), third (3) and other reasons in order of importance.

(a) failing examination, or theory too difficult	( )
(b) lack of interest in the trade	( )
(c) no advantage in becoming certified	( )
(d) unable to secure steady employment during apprenticeship	( )
(e) unable to earn a decent living	( )
(f) poor working conditions	( )
(g) opportunity for better position elsewhere	( )
(h) not given opportunity to receive trade training on-the-job	( )
(i) unable to get along with foreman (or immediate boss)	( )
(j) poor health	( )
(k) others (please specify) _____	( )
_____	( )

9. If you had completed your apprenticeship, do you believe that

	YES	NO	NO IDEA
(a) you would have been able to earn more money	☐	☐	☐
(b) you would have been able to obtain more promotions	☐	☐	☐
(c) you would have gained more respect	☐	☐	☐
(d) you would have less difficulty in obtaining and maintaining employment	☐	☐	☐

B. EMPLOYMENT

10. Were you employed when you withdrew from the apprenticeship program?

YES ☐ NO ☐

How long were you unemployed before you withdrew?

_____
No. of weeks

11. How long did you work for the employer with whom you were indentured?

_____ years _____ months

12. Given the opportunity, would you return to the firm in the same or at a higher position? (Answer YES if you did return to the same employer.)

YES NO DON'T KNOW

13. Were you offered steady employment with your employer at time of withdrawal?

(a) yes, at higher wages ☐

(b) yes, at equal wages ☐

(c) yes, at less wages ☐

(d) No. ☐

14. If you were not offered steady employment or left employer, how soon after withdrawing did you get a job?

_____
No. of weeks

15. Once you obtained a job, or returned to the same job, did you receive

(a) higher wages ☐

(b) equal wages ☐

(c) less wages ☐

16. What sort of relationship did you have with your immediate supervisor during your apprenticeship period?

(a) worked well with him ☐

(b) worked fairly well ☐

(c) did not work well with him ☐

17. During your indentureship, did you find

	YES	NO	SOMEWHAT
(a) that your work was routine and unchallenging	☐	☐	☐
(b) that you did not seem suited for the type of work involved	☐	☐	☐
(c) that you just could not get interested in the trade	☐	☐	☐

18. When you withdrew from the apprenticeship program your weekly "take home" pay was:

(a) $50.00 or below _____

(b) $51.00 to $75.00 _____

(c) $76.00 to $100.00 _____

(d) $101.00 to $125.00 _____

(e) $126.00 or above _____

19. Since withdrawing from the program how many jobs have you held, including the present one?

(a) one ☐ (b) two ☐ (c) three ☐

(d) four ☐ (e) five or more ☐

20. If you held more than one job,

(a) about what was the shortest period of time that you had been on a job? _____ (weeks)

(b) about what was the longest period of time you had been on a job? _____ (months)

21. How much difficulty did you have in locating your first job?

none ☐

very little ☐

some ☐

a lot ☐

22. Since withdrawing, have you been unemployed at any time?

YES ☐ → 1st time _____ weeks NO ☐

2nd time _____ weeks

3rd time _____ weeks

etc.

23. What kind of job are you holding down now? (Please classify the job using at least two words. For example: "stockroom clerk" instead of "clerk" or automobile mechanic" instead of "mechanic".)

_____

24. About how much are your weekly earnings (take home pay) at your present job?

(a) $75 or below _____

(b) $76.00 to $100.00 _____

(c) $101.00 to $125.00 _____

(d) $126.00 to $150.00 _____

(e) $151.00 to $175.00 _____

(f) $176.00 to $200.00 _____

(g) $201.00 or above _____

25. How do you feel about your present job? Please circle the number which indicates your feeling. A "1" is the lowest rating, a "5" is the highest rating and a "3" is in between.

	HIGH				LOW
(a) I like my present job	5	4	3	2	1
(b) I like my chances for promotion	5	4	3	2	1
(c) I like my chance for getting a better job	5	4	3	2	1
(d) I feel that I have a secure, steady job with this firm	5	4	3	2	1

26. Could you perform your present job if you did not have apprenticeship training?

YES ☐ NO ☐ YES, BUT TRAINING HELPED ☐

C. PERSONAL DATA

27. In which of the following courses did you receive more than 20 credits while in high school?

(a) academic courses (maths, English, physics, et cetera) ☐

(b) automotives ☐ (c) electricity ☐ (d) sheet metals ☐

(e) autobody ☐ (f) building const. ☐ (g) pipe trades ☐

(h) welding ☐ (i) drafting ☐ (j) graphic arts ☐

(k) electronics ☐ (l) machine shop ☐ (m) appliance repair ☐

(n) none ☐

28. What is or was [redacted] father's occupation?

	Please specify
(a) Profession (lawyer, doctor, banker, teacher . . . etc)	_____
(b) Owns or manages business (store, gas station, barber shop, etc.)	_____
(c) Office worker (bookkeeper, cashier, postal clerk, etc)	_____
(d) Sales (insurance, real estate, retail store)	_____
(e) Skilled tradesman (carpenter, machinist, electrician, etc.)	_____
(f) Owns or manages farm	_____
(g) Worker (labourer, farm labourer, factory worker, janitor, etc.)	_____
(h) Other (be specific)	_____

29. How much education did or does your father have?

(a) less than seven years at school----------
(b) junior high school (grades 7 to 9)----------
(c) some high school (grades 10 or 11)----------
(d) graduated from high school----------
(e) some college or university training----------
(f) a university degree----------

30. Did you discuss your plans to cancel your apprenticeship with:

	YES	NO	DON'T REMEMBER
(a) apprenticeship board	☐	☐	☐
(b) employer	☐	☐	☐

(c) personnel at trades training school ☐ ☐ ☐

(d) other (please specify) _____

31. During your apprenticeship period at the trades training school, did you receive any financial assistance in addition to the regular subsistance allowance?

YES ☐ NO ☐

(a) loan ☐

(b) aid from parents ☐

(c) wife working ☐

(d) part-time work ☐

(e) other (please specify) _____

32. Do you own (a) a car YES ☐ NO ☐

(b) a house YES ☐ NO ☐

(c) other property YES ☐ NO ☐

33. Would you care to add any comments on any phase of the apprenticeship program that has not been covered?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

APPENDIX 2

LETTERS TO SAMPLE

May 1, 1971

Dear Sir:

Provincial Apprenticeship Board records indicate that you were indentured as an apprentice in the trade and that your contract was cancelled in . The Board is very interested in your progress since withdrawal and the Director has given me permission to contact you. You are being asked to participate in a study of persons who entered an apprenticeship program and had their contracts cancelled before becoming qualified journeymen.

I am a graduate student in vocational education at the University of Alberta. This independent study forms part of my graduate program. I am not employed by the Apprenticeship Board.

Sending a questionnaire to every cancelled apprentice would present many difficulties; therefore, you have been selected at random to represent a large number of persons similar to yourself. Your responses are critical. The success of the study depends on you. If you feel that you cannot reply would you please tell me why?

It would be much appreciated if you would fill out the enclosed questionnaire and return it in the stamped, addressed envelope. Please feel free to supplement your answers with any comments you feel are necessary.

All of your responses will be treated in the strictest confidence. You have been assigned a code number to assist in collecting data. Once your completed questionnaire is received, this number will be removed and the responses recorded. No reference will be made to individuals.

It is most important to the study that you return the questionnaire by May 15.

Thank you for participating.

Sincerely,

Ted Ramsay

May 10, 1971

Dear

A short time ago a questionnaire relating to the cancellation of your apprenticeship was mailed to you. As yet I have not received your completed questionnaire. Could you please return it as soon as possible?

Your frank responses are of vital importance to the success of the study and your participation would be greatly appreciated.

All of your responses will be kept in the strictest confidence.

In case you have misplaced the first questionnaire, I am enclosing another copy.

If you have mailed the questionnaire already, please accept my thanks and ignore this letter.

Sincerely,

Ted Ramsay
Principal Investigator

May 22. 1971

Dear

A short time ago a questionnaire relating to the cancellation of your apprenticeship was mailed to you. As yet, I have not received your completed questionnaire. Could you please return it before the end of May.

Your frank responses are of vital importance to the success of the study and your participation would be greatly appreciated.

All of your responses will be kept in the strictest confidence.

If you have mailed the questionnaire already, please accept my thanks and ignore this letter.

Sincerely,

Ted Ramsay
Principal Investigator

APPENDIX 3

FREQUENCY COUNTS FOR CHAPTER 4

TABLE 3.1

Distribution of Sample by Age at Indenture

Age at Indenture years	N	% of Sample
16 - 18	35	14.7
19 - 21	92	38.6
22 - 24	41	17.3
25 - 27	26	10.9
28 - and over	44	18.5
TOTAL	238	100

Mean: 23.2 Median: 23

Source Provincial Apprenticeship Board

Department of Labour, Province of Alberta, Edmonton, Alberta

TABLE 3.2

Average Age in Years of Sample at Indenture

Grouped by Trade, by Year of Program at Cancellation and by Calendar Year of Cancellation.

Calendar Year of Cancellation	Carpenters		Electricians		Motor Mechanics		
	Program Year of Cancellation						
	2	3 & 4	2	3 & 4	2	3 & 4	Mean
1968	23.5	25.2	22.0	23.9	22.6	25.7	23.8
1969	20.3	22.0	24.3	25.1	22.5	23.0	22.9
1970	20.0	24.2	20.1	23.1	25.4	24.5	22.9
Mean	21.2	23.8	22.1	24.0	23.5	24.4	23.2

Source: Provincial Apprenticeship Board, Department of Labour, Province of Alberta, Edmonton, Alberta

TABLE NO. 3.3

Responses to Item 27: "In which high school course did you receive more than 20 credits". Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Academic[a]	Automotive	Electricity	Bldg. Const.	Drafting	None
Grouped by trade							
Carpenters	32	15	1	0	2	0	14
Electricians	35	24	1	4	0	2	4
Motor Mechanics	72	20	16	0	0	2	34
Grouped by calendar year							
1968	41	16	6	0	0	0	19
1969	43	25	5	0	0	0	13
1970	55	18	7	4	2	4	20
Grouped by year of Program							
2	86	38	13	3	2	1	29
3 & 4	53	21	5	1	0	3	23
TOTALS	139	59	18	4	2	4	52

a. Respondents who checked both academic and a trade area were only counted in the Trade Area.

TABLE NO. 3.4

Marital Status of Sample at Indenture

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Married	Single [a]
Grouped by trade			
Carpenters	56	20	36
Electricians	53	21	32
Motor Mechanics	129	57	72
Grouped by calendar year			
1968	68	30	38
1969	72	26	46
1970	98	42	56
Grouped by year of program			
2	132	48	84
3 & 4	106	50	56
TOTALS	238	96	140

[a] Includes cancelled apprentices who were separated or divorced.

Source: Provincial Apprenticeship Branch, Department of Labour, Province of Alberta, Edmonton, Alberta

TABLE NO. 3.5

Responses to Item 29: "How much Education does your Father have"?

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	7 Years	Grades 7-9	Grades 10-11	High School Graduate	Some College or University	University Degree	No Response
Grouped by trade								
Carpenters	32	7	9	8	4	1	0	3
Electricians	35	11	8	5	4	5	0	2
Motor Mechanics	72	25	22	12	3	2	5	3
Grouped by calendar year								
1968	41	11	16	4	4	2	2	2
1969	43	13	8	9	5	4	1	3
1970	55	19	15	12	2	2	2	3
Grouped by yearof Program								
2	86	24	24	11	9	6	4	8
3 & 4	53	19	15	14	2	2	1	0
TOTALS	139	43	39	25	11	8	5	8

TABLE NO. 3.6

Responses to Item 27: "What is or was Your Father's Occupation".

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Pro-fession-al	Owns or Manages Business	Office Worker	Sales	Trades-man	Owns or Manages Farm	Worker	No Response
Grouped by trade									
Carpenters	32	2	4	2	1	9	8	1	5
Electricians	35	0	3	1	2	8	8	9	4
Motor Mechanics	72	2	10	3	2	11	26	12	6
Grouped by calendar year									
1968	41	0	8	3	2	6	8	9	5
1969	43	3	5	1	1	7	15	6	5
1970	55	1	4	2	2	15	19	7	5
Grouped by year of Program									
2	86	4	11	4	4	18	21	12	12
3 & 4	53	0	6	2	1	10	21	10	2
TOTALS	139	4	17	6	5	28	42	22	15

a. Includes Respondents who did not know their father's present occupation.

APPENDIX 4

FREQUENCY COUNTS FOR CHAPTER 5

TABLE NO. 4.1

Responses to Item 4: "Why did you enter into an Apprenticeship Contract"?

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N CHOICE	Req'd. to		Not Sat'fd with Openings		Earn More		Gain Respect		Job Sec.		No Interest Academic Ed.		Financial Assist.		Better Treatment		No Special Reason	
		1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2
Grouped by trade																			
Carpenters	32	6	0	9	6	10	5	2	0	3	7	2	3	0	0	0	1	0	1
Electricians	35	7	2	16	1	4	10	0	2	5	0	1	4	0	0	0	1	2	0
Motor Mechanics	72	7	6	12	14	16	9	3	2	25	10	3	6	1	2	2	1	3	1
Grouped by calendar year																			
1968	41	5	0	15	8	10	7	2	1	6	6	1	8	0	0	0	0	2	0
1969	43	6	4	11	9	9	7	3	2	12	5	2	0	0	1	0	0	0	0
1970	55	9	4	11	4	11	10	0	1	15	6	3	5	1	1	2	3	3	2
Grouped by yearof Program																			
2	86	10	5	21	12	19	17	3	2	23	10	4	10	0	1	2	2	4	1
3 & 4	53	10	3	16	9	11	7	2	2	10	7	2	3	1	1	0	1	1	1
TOTALS	139																		

TABLE NO. 4.2

Responses to Item 5: "Why did you Indenture in this particular Trade Field?"

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Family in Trade		Prof.Status		Interest		Job Opened		Adv.Opport.		High Sch.Trng.		Influenced	
		1st ch.	2nd ch.	1	2	1	2	1	2	1	2	1	2	1	2
Grouped by trade															
Carpenters	32	2	5	0	4	22	1	3	2	1	2	1	4	3	3
Electricians	35	2	3	0	2	26	1	0	3	5	3	0	2	2	5
Motor Mechanics	72	2	1	1	2	59	3	5	3	0	5	2	9	3	7
Grouped by calendar year															
1968	41	1	4	0	2	32	2	2	0	2	2	2	3	2	4
1969	43	1	2	1	3	30	1	5	4	3	1	1	9	2	4
1970	55	4	3	0	3	45	2	1	4	1	7	0	3	4	7
Grouped by yearof Program															
2	86	2	8	1	6	70	0	4	5	5	6	1	12	3	10
3 & 4	53	4	1	0	2	37	5	4	3	1	4	2	4	5	5
TOTALS	139														

TABLE NO. 4.3

Responses to Item 21: "How much difficulty did you have in locating your first job

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	None	Very Little	Some	Alot
Grouped by trade					
Carpenters	32	16	11	4	1
Electricians	35	19	14	2	0
Motor Mechanics	72	42	22	1	7
Grouped by calendar year					
1968	41	25	15	0	1
1969	43	30	7	3	3
1970	55	22	25	4	4
Grouped by yearof Program					
2	86	45	34	2	5
3 & 4	53	32	13	5	3
TOTALS	139	77	47	7	8

TABLE NO. 4.4

Response to Item 6: Grouped by Trade
Statements expressing opinion during app. training.

GROUP	N	Sat. Personal Needs	App. Period Right Lgth.	Granted En. Credit	Theory Easy	Training Modern	Enough Visits App. Board	Enough Guid & Counselg.	Enough Trng. on-Job	On the Job Trng. Retailed	Exams-Fair	Exams-Related
						Answer Yes						
Carpenters	32	9	18	12	17	18	9	16	8	16	11	17
Electricians	35	12	18	15	10	20	8	11	11	21	11	18
Motor Mechanics	72	33	44	45	36	54	28	29	28	43	42	43
TOTAL	139	54	80	72	63	92	45	56	47	80	64	78
						Answer Yes, Fairly						
Carpenters	41	15	9	3	13	10	2	2	6	8	11	11
Electricians	43	14	11	10	18	10	3	11	8	9	16	15
Motor Mechanics	55	26	18	12	24	10	16	24	23	18	21	21
TOTALS	139	55	38	25	55	30	21	37	37	35	48	47
						Answer No						
Carpenters		8	5	17	2	4	21	14	18	8	10	4
Electricians	86	9	6	10	7	5	24	13	16	5	8	2
Motoer Mechanics	53	13	10	15	12	8	28	19	21	11	9	8
TOTALS	139	30	21	42	21	17	73	46	55	24	27	14

TABLE NO. 4.5

Response to Item 6: Grouped by Calendar Year - Statements Expressing Opinion During App. Training

GROUP	N	a	b	c	d	e	f	g	h	i	j	k
						Answer Yes						
1968	41	18	17	26	17	30	15	18	16	26	22	27
1969	43	17	31	21	22	25	15	20	11	25	19	22
1970	55	19	32	25	24	37	15	18	20	29	23	29
TOTALS	139	54	80	72	63	92	45	56	47	80	64	78
						Answer Yes, Fairly						
1968	41	14	19	11	17	6	10	11	9	11	13	13
1969	43	19	4	7	17	12	3	10	14	9	12	14
1970	55	22	15	7	21	12	8	16	14	15	23	20
TOTALS	139	55	38	25	55	30	21	37	37	35	48	47
						Answer No						
1968	41	9	5	4	7	5	16	12	16	8	6	1
1969	43	7	8	15	4	6	25	13	19	5	12	7
1970	53	14	8	23	10	6	32	21	21	11	9	6
TOTALS	139	30	21	42	21	17	73	46	55	24	27	14

TABLE NO. 4.6

Response to Item 6: "Grouped by Year of Program at Cancellation"
Statements Expressing Opinions during App. Training.

GROUP	N	a	b	c	d	e	f	g	h	i	j	k
						Answer Yes						
2	76	29	46	43	39	54	20	31	32	51	36	46
3 & 4	53	25	34	29	24	38	20	25	15	29	28	32
TOTALS	139	54	80	72	63	92	45	56	47	80	64	78
						Answer Yes, Fairly						
2		33	28	15	37	18	16	20	20	21	32	31
3 & 4		22	10	10	18	12	5	17	17	14	16	16
TOTALS		55	38	25	55	30	21	37	37	35	48	47
						Answer No						
2		24	12	28	10	14	15	35	34	14	18	9
3 & 4		-6	9	14	11	3	23	11	21	10	9	5
TOTALS		30	21	42	21	17		46	55	24	27	14

TABLE NO.4.7

Responses to Item 7: "Was the course taught at the Trade School ..."

Grouped by Trade

GROUP	N	(a) Practical	(b) Up-to-Date	(c) Well Taught	(d) Well Equipped	(e) Well Staffed	(f) Long Enough	(g) Generally Good
				Answer Yes				
Carpenters	32	24	18	21	30	24	13	22
Electricians	35	22	19	16	25	18	12	22
Motor Mechanics	72	57	53	56	63	59	39	59
TOTALS		103	90	93	118	101	64	103
				Answer Yes, Fairly				
Carpenters		3	9	8	2	7	10	7
Electricians		8	12	14	8	13	12	12
Motor Mechanics		14	12	11	9	10	17	13
TOTALS		25	33	33	19	30	39	32
				Answer No				
Carpenters		5	5	3	0	1	9	3
Electricians		5	4	5	2	4	11	1
Motor Mechanics		1	7	3	0	3	16	0
TOTALS	139	11	16	13	2	8	36	4

TABLE NO. 4.8

Responses to Item 7: "Was the course taught at the Trade School ..."
Grouped by Calendar Year

GROUP	N	(a) Practical	(b) Up-to-Date	(c) Well Taught	(d) Well Equipped	(e) Well Staffed	(f) Long Enough	(g) Generally Good
				Answer Yes				
1968	41	36	32	33	40	34	24	22
1969	43	32	23	26	37	33	20	22
1970	55	35	35	34	41	34	20	59
TOTALS		103	90	93	118	101	64	103
				Answer Yes, Fairly				
1968		2	6	6	1	5	7	7
1969		5	12	10	6	7	7	12
1970		18	15	17	12	18	25	13
TOTALS		25	33	33	19	30	39	32
				Answer No				
1968		3	3	2	0	2	9	3
1969		6	8	7	0	3	11	1
1970		2	5	4	2	3	16	0
TOTALS	139	11	16	13	2	8	36	4

TABLE NO. 4.9

Responses to Item 7: "Was the course taught at the Trade School ..." Grouped by Year of Program at Cancellation

GROUP	N	(a) Practical	(b) Up-to-Date	(c) Well Taught	(d) Well Equipped	(e) Well Staffed	(f) Long Enough	(g) Generally Good
				Answer Yes				
2	86	64	52	56	75	60	43	61
3 & 4	53	39	38	37	43	41	21	42
TOTALS		103	90	93	118	101	64	103
				Answer Yes, Fairly				
2		12	22	18	9	19	26	21
3 & 4		13	11	15	10	11	13	11
TOTALS		25	33	33	19	30	39	32
				Answer No				
2		10	12	12	2	7	17	4
3 & 4		1	4	1	0	1	19	0
TOTALS	139	11	16	13	2	8	36	4

TABLE NO. 4.10

Responses to Item 16: "What sort of relationship did you have with your immediate supervisor ..."
Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Worked Well with Him	Worked Fairly Well	Did Not Work Well with Him	No Response
Grouped by trade					
Carpenters	32	18	3	6	5
Electricians	35	18	16	1	0
Motor Mechanics	72	37	23	9	3
Grouped by calendar year					
1968	41	23	14	2	2
1969	43	23	13	5	2
1970	55	27	15	9	4
Grouped by year of Program					
2	86	41	32	10	3
3 & 4	53	32	10	6	5
TOTALS	139	73	42	16	8

TABLE NO. 4.11

Responses to Item 17: "During your Indentureship, did you find ...."
Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Work Routine and Unchall.			Not Suited for Work			Not Interested in Trade		
		Yes	No	Somewhat	Yes	No	Somewhat	Yes	No	Somewhat
Grouped by trade										
Carpenters	32	8	15	9	4	22	6	2	30	0
Electricians	35	9	16	10	2	22	11	3	24	8
Motor Mechanics	72	13	40	19	7	54	11	4	60	8
Grouped by calendar year										
1968	41	11	23	7	4	27	10	1	38	2
1969	43	9	18	16	4	33	6	3	36	4
1970	55	10	20	15	5	38	12	5	40	10
Grouped by year of Program										
2	86	24	44	18	8	58	20	6	69	11
3 & 4	53	6	27	20	5	40	8	3	45	5
TOTALS	139	30	71	38	13	98	28	9	114	16

TABLE NO. 4.12

"Responses to Item 31: " .... at the Trades Training School, did you receive any Financial Assistance in addition to the Regular Subsistance Allowance"

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Yes	No
Grouped by trade			
Carpenters	32	11	21
Electricians	35	16	19
Motor Mechanics	72	28	44
Grouped by calendar year			
1968	41	14	27
1969	43	21	22
1970	55	20	35
Grouped by year of Program			
2	86	34	52
3 & 4	53	21	32
TOTALS	139	55	84

TABLE NO. 4.13

Responses to Item 31: - Second Part

Source of Financial Assistance of Respondents Who Received Aid During Period at Trades School. Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	LOAN	AID FROM PARENTS	WIFE WORKING	PART-TIME WORK
Grouped by trade					
Carpenters	11	6	1	2	2
Electricians	16	3	1	8	4
Motor Mechanics	28	11	1	10	6
Grouped by calendar year					
1968	14	2	1	8	3
1969	21	10	1	6	4
1970	20	8	1	6	5
Grouped by year of Program					
2	34	13	3	14	4
3 & 4	21	7	0	6	8
TOTALS	55	20	3	20	12

TABLE NO. 4.14

Responses to Item 8: "What were your reasons for withdrawing from the Apprenticeship Program"

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Failing or Theory Diff.		Lack of Interest		No Adv. in Cert.		No Steady Employ.		No Living Wage	
		1	2	1	2	1	2	1	2	1	2
Grouped by trade											
Carpenters	32	0	0	0	0	0	1	10	0	6	3
Electricians	35	3	3	6	2	0	1	9	2	7	3
Motor Mechanics	72	2	3	5	2	4	4	11	2	22	9
Grouped by calendar year											
1968	41	3	2	4	2	1	3	9	1	9	3
1969	43	1	0	2	1	2	0	11	0	11	8
1970	55	1	4	5	1	1	3	10	3	15	4
Grouped by year											
2	86	2	3	6	2	2	3	18	3	23	6
3 & 4	53	3	3	5	2	2	3	12	1	12	9
TOTALS	139	5	6	11	4	4	6	30	4	35	15

TABLE NO. 4.15

Responses to Item 8: (continued)

GROUP	Poor Wrking. Conditions		Better Opportunities		No On Job Training		Conflict W. Foreman		Health		Went Into Other Trade	
	1	2	1	2	1	2	1	2	1	2	1	2
Grouped by trade												
Carpenters	4	3	3	3	0	2	3	1	3	0	3	0
Electricians	2	2	5	5	2	1	0	3	1	1	0	0
Motor Mechanics	2	4	14	11	2	4	3	3	4	2	3	0
Grouped by calendar year												
1968	3	4	6	5	1	4	2	1	3	0	0	0
1969	3	4	4	7	2	2	1	1	3	3	3	0
1970	2	1	12	7	1	1	3	5	2	0	3	0
Grouped by year of Program												
2	4	7	12	13	3	6	5	4	5	3	6	0
3 & 4	4	2	10	6	1	1	1	3	3	0	0	0
TOTALS	8	9	22	19	4	7	6	7	8	3	6	0

TABLE NO. 4.16

Responses to Item 10(a) "Were you employed when you withdrew ..."
Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Yes	No
Grouped by trade			
Carpenters	32	25	7
Electricians	35	29	6
Motor Mechanics	72	57	15
Grouped by calendar year			
1968	41	35	6
1969	43	38	5
1970	55	38	17
Grouped by year of Program			
2	86	70	16
3 & 4	53	41	12
TOTALS	139	111	28

TABLE NO. 4.17

Responses to Item 106: "How long were you unemployed at time of withdrawing?"
Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Duration of Unemployment in Weeks 1 - 6	7 - 12	13 or Over
Grouped by trade				
Carpenters	7	3	4	0
Electricians	6	3	2	1
Motor Mechanics	15	10	4	1
Grouped by calendar year				
1968	6	4	2	0
1969	5	2	3	0
1970	17	10	5	2
Grouped by year				
2		8	7	1
3 & 4		8	3	1
TOTALS		16	10	2

TABLE NO. 4.18

Responses to Item 11: "How long did you work for the employer with whom you were indentured"

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Time with Employer in Months				
		12 or less	13 - 24	25 - 36	37 - 48	Over 48
Grouped by trade						
Carpenters	32	7	11	13	0	1
Electricians	35	8	12	6	2	7
Motor Mechanics	72	26	22	8	4	12
Grouped by calendar year						
1968	41	13	9	8	2	9
1969	43	9	17	11	1	5
1970	55	19	19	8	3	6
Grouped by year						
2	86	28	28	16	2	12
3 & 4	53	13	17	11	4	8
TOTALS	139	41	45	27	6	20

a. Some respondents are still with some employer.

TABLE 4.19

Responses to Item 12: "Given the Opportunity. Would you return to the firm in the same or at a higher position"
Grouped by Trade, by Calendar Year, by Year of Program at Cancellation

GROUP	N	Yes[a]	No	Don't Know
Grouped by Trade				
CARPENTERS	32	11	16	5
ELECTRICIANS	35	7	15	13
MOTOR MECHANICS	72	20	35	17
TOTALS				
Grouped by Calendar Year				
1968	41	14	23	4
1969	43	11	21	11
1970	55	13	22	20
TOTALS				
Grouped by Year of Program				
2	86	23	45	18
3 & 4	53	15	21	17
TOTALS		38	66	35

a. Includes those who returned to same employer

TABLE NO. 4.20

Responses to Item 13: "Were you offered steady employment with your employer at time of withdrawal"

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Yes, at Higher Wages	Yes, at Equal Wages	Yes, at Less Wages	No
Grouped by trade					
Carpenters	32	6	10	1	15
Electricians	35	8	12	2	13
Motor Mechanics	72	12	29	2	29
Grouped by calendar year					
1968	41	5	20	0	16
1969	43	10	18	1	14
1970	55	11	13	4	27
Grouped by yearof Program					
2	86	17	30	2	37
3 & 4	53	9	21	3	20
TOTALS	139	26	51	5	57

TABLE NO. 4.21

Responses to Item 18: "When you withdrew from the Apprenticeship Program your weekly take home pay was:"
By Trade, by Calendar Year, by Year of Program

GROUP	N	$50. or Below	$51. to $75.	$76. to $100.	$101. to $125.	$126 or Above
Grouped by trade						
Carpenters	32	1	10	13	7	1
Electricians	35	2	12	17	2	2
Motor Mechanics	72	5	28	32	4	3
Grouped by calendar year						
1968	41	3	17	16	3	2
1969	43	4	12	20	5	2
1970	55	1	21	26	5	2
Grouped by year of program						
2	86	6	31	41	7	1
3 & 4	53	2	19	21	6	5
TOTALS	139	8	50	62	13	6

Range = 132 Mean = $80

TABLE NO. 4.22

Responses to Item 30: "Did you discuss your plans to cancel your apprenticeship with:"
Grouped by Trade, by Calendar Year and by Year of Program

GROUP	N	Apprenticeship Board			Employer			Trades Training School		
		Yes	No	Don't Rem.	Yes	No	Don't Rem.	Yes	No	Don't Rem.
Grouped by trade										
Carpenters	32	12	18	2	11	21	0	4	27	1
Electricians	35	12	22	1	11	22	2	1	34	0
Motor Mechanics	72	23	40	9	24	40	8	10	56	6
Grouped by calendar year										
1968	41	12	26	3	15	26	0	1	40	0
1969	43	15	24	4	15	26	2	7	35	1
1970	55	20	30	5	16	31	8	7	42	6
Grouped by year of Program										
2	86	31	49	6	30	50	6	7	74	5
3 & 4	53	16	31	6	16	33	4	8	43	2
TOTALS	139	47	80	12	46	83	10	15	117	7

APPENDIX 5

FREQUENCY COUNTS FOR CHAPTER 6

TABLE NO. 5.1

Responses to Item 1: "Since cancelling your Apprenticeship Contract, have you been re-instated in the same Trade or Re-registered in another..."

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Yes	No
		Grouped by trade	
Carpenters	32	8	24
Electricians	35	7	28
Motor Mechanics	72	24	48
		Grouped by calendar year	
1968	41	9	32
1969	43	16	27
1970	55	14	41
		Grouped by year of Program	
2	86	22	64
3 & 4	53	17	36
TOTALS	139	39	100

TABLE NO. 5.2

Responses to Item 2: "How many times have you been re-registered "or reinstated"

Grouped by Grade, by Calendar Year, by Year of Program

GROUP	N	Number of times re-registered		
		1	2	No Response
		Grouped by trade		
Carpenters	8	6	2	0
Electricians	7	7	0	0
Motor Mechanics	24	21	1	2
		Grouped by calendar year		
1968	9	6	3	0
1969	16	15	0	1
1970	14	13	0	1
		Grouped by year		
2	22	17	3	2
3 & 4	17	17	0	0
TOTALS	39	34	3	2

TABLE NO. 5.3

Responses Related to Item 2

Distribution of Respondents According to Whether They Returned to Apprenticeship in a Trade Related to Previous Trade, Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Related	Not Related	No Response
		Grouped by Trade		
CARPENTERS	8	5	3	0
ELECTRICIANS	7	5	2	0
MOTOR MECHANICS	24	16	6	2
TOTALS	39	26	11	2

TABLE 5.4

Responses to Item #3: "Have you subsequently become a qualified journeyman"

Grouped by Trade

GROUP	N	Yes	No
		Grouped by Trade	
CARPENTERS	32	2	30
ELECTRICIANS	35	1	34
MOTOR MECHANICS	72	7	65
TOTALS	139	10	129

TABLE NO. 5.5

Responses to Item 14: "If you were not offered steady employment or left employer, how soon after withdrawing, did you get a job".

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N [a.]	Time in Weeks		
		0 - 6	7 - 12	13 and Over
Grouped by trade				
Carpenters	22	21	1	0
Electricians	23	22	0	1
Motor Mechanics	51	47	2	2
Grouped by calendar year				
1968	25	25	0	0
1969	23	26	1	0
1970	42	39	2	3
Grouped by year of Program				
2	54	49	3	2
3 & 4	42	41	0	1
TOTALS	96	90	3	3

a. 96 of the 139 respondents were not offered steady employment or left employer.

TABLE NO. 5.6

Responses to Item 15: "Once you obtained a job, or returned to the same job, did you receive"

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	HIGHER WAGES	EQUAL WAGES	LESS WAGES
Grouped by trade				
Carpenters	32	15	10	7
Electricians	35	20	13	2
Motor Mechanics	72	49	19	4
Grouped by calendar year				
1968	41	24	15	2
1969	43	29	9	5
1970	55	31	18	6
Grouped by year of Program				
2	86	54	22	10
3 & 4	53	30	20	3
TOTALS	139	84	42	13

TABLE NO. 5.7

Responses to Item 19: "Since withdrawing from the program, how many jobs have you held, including the present one"

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	NUMBER OF JOBS				
		ONE	TWO	THREE	FOUR	FIVE OR MORE
Grouped by trade						
Carpenters	32	7	12	7	4	2
Electricians	35	17	8	10	0	0
Motor Mechanics	72	46	12	9	2	3
Grouped by calendar year						
1968	41	18	8	11	1	3
1969	43	28	8	6	0	1
1970	55	24	16	9	5	1
Grouped by year of Program						
2	86	35	24	19	5	3
3 & 4	53	35	8	7	1	2
TOTALS	139	70	32	26	6	5

TABLE NO. 5.8

Responses to Item 20: (a) and (b) "If you held more than one job, about what was ...."

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	(a) Shortest Period in Weeks					(b) Longest Period in Month				
		1-12	13-24	25-36	37 & Over	No Response	1-12	13-24	25-36	37 & Over	No Response
Grouped by trade											
Carpenters	25	11	3	3	3	5	5	7	3	5	5
Electricians	18	11	2	0	1	4	4	4	4	2	4
Motor Mechanics	26	14	3	2	4	2	8	7	4	5	2
Grouped by calendar year											
1968	23	13	5	0	4	1	0	8	4	10	1
1969	15	7	0	3	3	2	4	5	4	0	2
1970	31	16	3	2	1	8	13	5	3	2	8
Grouped by year of Program											
2	51	27	7	3	4	9	11	12	10	9	9
3 & 4	18	9	1	2	4	2	6	6	1	3	2
TOTALS	69	36	8	5	8	11	17	18	11	12	11

TABLE 5.9

Responses to Item 22: "Since withdrawing, have you been unemployed at any time"

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Yes	No
Grouped by Trade			
CARPENTERS	32	21	11
ELECTRICIANS	35	11	24
MOTOR MECHANICS	72	26	42
Grouped by Calendar Year			
1968	41	16	25
1969	43	13	30
1970	55	29	26
Grouped by Year of Program			
2	86	41	45
3 & 4	53	17	36
TOTALS	139	58	81

TABLE NO. 5.10

Times and Number of Weeks Out of Work of Respondents who indicated unemployment in Item 22

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	1 to 6 Weeks			7 to 12 Weeks			13 Weeks or Over		
		1st Time	2nd T	3rd T	1st T	2nd T	3rd T	1st Time	2nd T	3rd T
Grouped by trade										
Carpenters	21	16	8	5	3	1	0	2	0	0
Electricians	11	9	2	0	1	0	0	1	1	1
Motor Mechanics	26	19	2	2	6	3	1	1	1	0
Grouped by calendar year										
1968	16	12	9	4	2	0	0	2	0	0
1969	13	6	0	2	7	2	1	0	1	0
1970	29	26	3	1	1	2	0	2	1	1
Grouped by year of Program										
2	41	32	12	6	7	2	0	2	2	1
3 & 4	17	12	0	1	3	2	1	2	0	0
TOTALS	58	44	12	7	10	4	1	4	2	1

TABLE NO. 5.11

Responses to Item 23: "What kind of job are you holding down now"
Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Clsssification of Present Position by Relationship to trade		
		Related to Trade	Somewhat Related	Not Related
Grouped by trade				
Carpenters	32	11	2	19
Electricians	35	11	1	23
Motor Mechanics	72	24	3	45
Grouped by calendar year				
1968	41	14	2	25
1969	43	13	1	29
1970	55	19	3	33
Grouped by year of Program				
2	86	28	4	54
3 & 4	53	18	2	33
TOTALS	139	46	6	87

TABLE NO. 5.12

Responses to Item 24: "About how much are your weekly earnings (take home pay) at your present job"

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Weekly Take Home Pay						
		$75. or Below	$76. -$100	$101. - $125	$126.-150.	$151. -$175.	$176. - $200.	$201. or Above
Grouped by trade								
Carpenters	32	2	5	11	3	7	1	3
Electricians	35	3	4	13	7	6	0	2
Motor Mechanics	72	2	23	27	7	7	1	5
Grouped by calendar year								
1968	41	2	4	19	5	5	1	5
1969	43	2	13	13	4	8	0	3
1970	55	3	15	19	8	7	1	2
Grouped by year of Program								
2	86	4	23	34	9	12	0	4
3 & 4	53	3	9	17	8	8	2	6
TOTALS	139	7	32	51	17	20	2	10

Range $195 Mean $124

TABLE NO. 5.13

Responses to Item 25: "How Do You Feel about your present job".

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Rating of Present Position		
		High (16 - 20 points)	Medium (10 - 15 points)	Low (4 - 9 points)
Grouped by trade				
Carpenters	32	20	5	7
Electricians	35	19	13	3
Motor Mechanics	72	42	22	8
Grouped by calendar year				
1968	41	27	11	3
1969	43	21	17	5
1970	55	33	12	10
Grouped by year of Program				
2	86	41	31	14
3 & 4	53	40	9	4
TOTALS	139	81	40	18

TABLE NO. 5.14

Responses to Item 32: "Do you own....."

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	A Car		A House		Other Property	
		Yes	No	Yes	No	Yes	No
Grouped by trade							
Carpenters	32	30	2	9	23	6	26
Electricians	35	31	4	11	24	9	26
Motor Mechanics	72	64	8	31	41	24	48
Grouped by calendar year							
1968	41	35	6	14	27	10	31
1969	43	40	3	18	25	15	28
1970	55	50	5	19	36	14	41
Grouped by year of Program							
2	86	76	10	29	57	24	62
3 & 4	53	49	4	22	31	15	38
TOTALS	139	125	14	51	88	39	100

TABLE NO. 5.15

Responses to Item 9: "If you had completed your apprenticeship, do you believe that you would have..."
Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Earned More Money			Obtained More Promotion			Gained More Respect			Obtained Employment Easier		
		Yes	No	No Idea	Yes	No	No Idea	Yes	No	No Idea	Yes	No	No Idea
Grouped by trade													
Carpenters	32	26	6	0	16	9	7	12	10	10	12	13	7
Electricians	35	29	6	0	14	10	11	10	13	12	16	11	8
Motor Mechanics	72	41	22	9	32	33	7	20	32	20	35	25	12
Grouped by calendar year													
1968	41	27	12	2	20	15	6	7	17	17	15	15	11
1969	43	29	10	4	16	17	10	11	16	16	25	14	4
1970	55	40	12	3	26	20	9	24	22	9	23	20	12
TOTALS	139	96	34	9	62	52	25	42	55	42	63	49	27

TABLE NO. 5.16

Responses to Item 26: "Could you perform your present job if you did not have Apprenticeship Training".
Grouped by TRade, by Calendar Year, by Year of Program

GROUP	N	Yes	Yes, but Training Helped	No
Grouped by trade				
Carpenters	32	18	5	9
Electricians	35	19	8	8
Motor Mechanics	72	37	18	17
Grouped by calendar year				
1968	41	20	10	11
1969	43	25	10	8
1970	55	29	11	15
Grouped by year of Program				
2	86	45	17	24
3 & 4	53	29	14	10
TOTALS		74	31	34

TABLE NO. 5.17

Responses to Item 33: "Would you care to add any comments on any phase of the Apprenticeship Program ... not covered"

Grouped by Trade, by Calendar Year, by Year of Program

GROUP	N	Rating of Comments		No Additional Comments
		Favorable	Unfavorable	
Grouped by trade				
Carpenters	32	3	7	22
Electricians	35	8	2	25
Motor Mechanics	72	9	7	56
Grouped by calendar year				
1968	41	6	5	30
1969	43	6	5	32
1970	55	8	6	41
Grouped by year of Program				
2	86	9	13	64
3 & 4	53	11	3	39
TOTALS	139	20	16	103